DESIGN EXHIBITION COMMITTEE

Mounted Gallery Co-Chairs:
Laura Kane, Framingham State University
Ashley Rougeaux-Barnes, Texas Tech University

Design Awards Committee:
Review Chair: Belinda Orzado, University of Delaware
Catalog: Sheri L. Dragoo, Texas Woman’s University
V.P. for Scholarship: Youn Kyung Kim, University of Tennessee

First Review
A total of 107 pieces were accepted through the peer review process for display in the 2017 ITAA Design Exhibition with a 37% acceptance rate. All jurying employed a double blind process so the jurors had no indication of whose work they were judging. A double-blind jury of textile and apparel peers reviewed each submission including design statement and images. Further, a panel of Industry experts reviewed submissions and award eligibility of entries.

Exhibition Event Sponsor
Cotton Incorporated

Award Sponsors
Alvanon
ATEXINC
Claire Scaeffe
Eden Travel International
EFI Optitex
Educators for Responsible Apparel Practices
Fashion Supplies
Gerber Technology
Intellect Books
Lectra
Regent’s University London

First Review - Professional Peers - ITAA Members

Melinda Adams, University of the Incarnate Word
Su Kyoung An, Central Michigan University
Laurie Apple, University of Arkansas
Lynn Blake, Lasell College
Lynn Boorady, Buffalo State College
Melanie Carrico, University of North Carolina, Greensboro
Chanjuan Chen, Kent State University
Kelly Cobb, University of Delaware
Sheri Dragoo, Texas Woman’s University
Rachel Eike, Baylor University
Andrea Eklund, Central Washington University
Jennifer Harmon, University of Wyoming
Erin Irick, University of Wyoming
Ashley Kim, SUNY Oneonta
Eundeok Kim, Florida State University
Helen Koo, Konkuk University
Ashley Kubley, University of Cincinnati
Jung Eun Lee, Virginia Tech
Young Joo Lee, Georgia Southern University
Diane Limbaugh, Oklahoma State University
Shu Hwa Lin, University of Hawaii at Manoa
Michael Mamp, Central Michigan University
Ellen McKinney, Iowa State University
Seoha Min, University of North Carolina, Greensboro
Colleen Moretz, West Virginia University
Kristen Morris, University of Missouri
Marian O’Rourke-Kaplan, University of North Texas
Belinda Orzada, University of Delaware
Anne Porterfield, North Carolina State University
Peggy Quesenberry, Virginia Tech
Della Reams, Miami University
Rebecca Robinson, Columbus College of Art and Design
Katya Roelse, University of Delaware
Carol Salusso, Washington State University
Paula Sampson, Ball State University
Jooyoung Shin, Cornell University
Susan Sokolowski, University of Oregon
Nupur Sharma, William Rainey Harper College
Casey Stannard, Louisiana State University
Janie Stidham, University of North Texas
Mia Whang, Centenary University
Yingying Wu, Kansas State University
Eunyoung Yang, Meredith College
Review of Designs

First Review – Apparel Industry Professionals
Katie Coble, Lead patternmaker and fabricator, Final Frontier Design
Tim Eads, Designer, artist, Tim Eads designs
Brandy Godsil, Artist/Designer, Saori Arts NYC/Co-Founder
Abby Lutz, Senior Design Manager, Urban Outfitters
John Paul Morabito, Fiber artist
Nga Nguyen, Head, User Experience-Wearable Technology, Principled Design
Amanda Perna, Fashion Designer/Creative Director, House of Perna
Megan Stein, Senior Designer for Special Occasion Dresses, Free People
Elizabeth Way, Assistant Curator, The Museum at the Fashion Institute of Technology

Conference Judges - Second Review
Scholarship accepted by the jury of textile and apparel peers for presentation undergo on-site review by the following judges to determine award recipients.

Professional Designers
Marisol Perez
Marisol is the head designer and stylist of Solimar Collection. As designer and stylist of the Solimar Collection, Marisol creates one of a kind Wearable Art couture garments out of up-cycled unconventional materials. Currently residing in Tampa, FL, Marisol is originally from Boston, Massachusetts, where she earned a Bachelor of Science in Marketing/Fashion Merchandising. She has recently been featured for her work in Keep Tampa Bay Beautiful’s Annual Fashion Show, the Winner of Most Wearable Costume, Expo Showcase, Tampa Garden Club, Fashion For The Cure, St. Jude Children’s, the Regent, Cocktails X Couture, Fashion Week, and the Ritz Ybor. Additionally, she has worked as a personal stylist for Dress For Success of Tampa and for the Happily Ever After Hour Wedding.

Elizabeth Carson Racker
Elizabeth is the owner and designer of her own self-titled apparel brand out of Tampa Bay, a Womenswear Designer with a philosophy to always apply the highest standards of creativity, honesty, quality, and innovation. Racker is known for presenting the latest trends while applying the highest standards of fabrication and constantly creating new and fresh silhouettes for the woman of today. As a native of Tampa, Florida, she was born into an eclectic family of talents and found my passion in fashion. She is a graduate of Savannah College of Art and Design. During her years at SCAD, she found her love for working with knit jersey and was highly recognized for her work by the likes of Eric Gaskin, Andre Leon Talley, and David Rodriguez just to name a few. She began her career with Ebony Fashion Fair as their Wardrobe Assistant and featured designer. After leaving Ebony, she continued to push her brand in Los Angeles, CA; Atlanta, GA, with Atlanta International Fashion Week; Belize City, Belize, with Continental Airlines Charity Event, Toys for Tots; NY, New York with BET Rip the Runway; NY, New York with Harlem Fashion Week; Miami, FL, and most recent New York Fashion Week.

Dr. Melinda Adams
Dr. Adams is a Professor at the University of the Incarnate Word in the Sullivan Center for Fashion Management. She has served as faculty at the University of Incarnate Word since 2005. She is an experienced Professor of Apparel Design and Merchandising with a demonstrated history of working in the higher education industry. Dr. Adams demonstrates skills as a strong arts and design professional, with strengths in computer design applications and event planning. She is currently serving as the Director of Master’s Program.
**Entry Categories**

Design submissions were identified using descriptive criteria including:
- Conceptual Experimental
- Couture Techniques
- Cultural Reference
- Historic Reference
- Interdisciplinary/collaborative
- Interdisciplinary/collaborative Patternmaking
- Ready-to-wear (Market-Directed)
- Surface design
- Sustainability

**Creative Design Awards**

Alvanon Creative Design Award
ATEXINC Award for Excellence in Marketable Textile Design
Blanche Payne Award
Claire Shaeffer Award for Outstanding Marketable Design
EFI Optitex Design in Technology Award
ESRAP Award for Sustainable Design
Eden Travel International Award
Fashion Supplies Award for Innovative Design
Gerber Technology Fashion Tech Professional Award
Lectra Kaledo Award for Faculty
Lectra Outstanding Faculty Modaris Award
Lectra Outstanding Graduate Student Modaris Award
Lectra Outstanding Graduate Student Kaledo Award
Sandra Hutton Award
ITAA Award for Innovative Design Scholarship
ITAA Award for Creative and Innovative Employment of Technique

**PROFESSIONAL, pages 9-58**

**Undulated One**
Rachel Anderson, Texas Tech University; and Chad Plunket, LHUCA Center for the Arts

**Secessionist Reformkleid: Striped Day Dress that Converts to a Tunic**
Anne Marie Eveline Bissonnette, University of Alberta

**Time and Cloth, Dress 1.0**
Catherine Kueffer Blumenkamp and Trish Ramsay, Sam Houston State University

**The Carnation Coat**
Chanjuan Chen and Kendra Lapolla, Kent State University

**Rebirth II**
Chanjuan Chen, Kent State University

**Glaciers**
Kyoung-Hee Cho, Mokpo National University

**Universal Lattice**
Sun Young Choi, Korea National Open University

**Pleated Bustle**
Sun Young Choi, Korea National Open University

**Rojo Mistral**
Rachel Jean Eike, Baylor University

**Bogolanfini in Leather**
Tameka Nicole Ellington, Kent State University

**Garden Series. Green Burial Robe Halfscale Prototype**
Sherry J. Haar, Kansas State University

**Irradiated Traditions: Navajo People Wearing the Yellow Dust of Uranium Toxicity**
Kim Hongyoun Hahn, Kent State University; and Ann Futterman Collier, Northern Arizona University;
PROFESSIONAL

Anahata Pulse
Kim Hongyoun Hahn and David H Hahn, Kent State University

Bete Noire: Extreme Asymmetry
Susan L. Hannel, University of Rhode Island

Homegrown: Investigating Design Potential of Bacterial Cellulose
Jennifer Harmon, University of Wyoming

Neon Moire
Ja Young Hwang and Kim HongYoun Hahn, Kent State University

Forever Green
Erin M. Irick, University of Wyoming

Oyster Shell: A Tribute to the Oregon Coast Part 2
Laura Kane, Framingham State University

Airy Bloom
Helen Sumin Koo, Konkuk University; and Seoha Min, University of North Carolina at Greensboro

T-shirt Resurgence
Jung Eun Lee, Virginia Tech

Beauty and Legacy of War
Youngjoo Lee, Georgia Southern University

Validated Flower
Yoon Kyung Lee, Seoul National University

Internal Peace in Life
Young-A Lee, Iowa State University; and Yu Mi Kwon, Sejong University

La Belle Lute
Stacey Rochelle Lim and Rachel Pastor, Central Michigan University

Star Flower Remade
Addie K. Martindale, Georgia Southern University

Achromatizing Effect
Addie K. Martindale

Solaris: A unisex solar-powered jacket for the day hiker
Ellen McKinney, Fatma Baytar, Kathryn Kaalberg, Shannon Roth, and Chanmi Hwang, Iowa State University

Transparent Pannier
Colleen Moretz, West Virginia University

Transformation Inward Out
Colleen Moreetz, West Virginia University

Visible - Trans Positive Apparel
Kristen D. Morris, University of Missouri

Luminosity: High Visibility Apparel for Runners
Kristen D. Morris, University of Missouri

Lucent Two: A Breathable Hooded Rain Jacket
Kristen D. Morris, University of Missouri

Changing Perspectives
Linda Ohrn-McDaniel, Kent State University

Spiraling through Generations
Linda Ohrn-McDaniel, Inger Ohrn, Greta Stenbom, and Jonathan McDaniel, Kent State University

Denim and Silk Ensemble
Belinda T. Orzada, University of Delaware

Upcycle and Zero Waste Ensemble
Belinda T. Orzada, University of Delaware

The Three Rs: Reclaim, Reuse . . . Really
Carla Anderson Perez, University of the Incarnate Word

White Forest
Anna Perry, Colorado State University
PROFESSIONAL

Owl
Anna Perry, Colorado State University

Chinese Red in Spring
Anna Perry, Colorado State University

Color Hearing: Bridal Chorus
Jessica L. Ridgway, Florida State University

Ommatidia
Ashley Rougeaux-Burnes, Texas Tech University

Dichotomy
Jooyoung Shin, Cornell University

Metamorphosis
Jooyoung Shin, Cornell University

Surrealism with Floating Origami Rose: A Cocktail Ensemble
Diane Carol Sparks and Tyler James Klene, Colorado State University

Elevating Scraps
Casey Rhea Stannard, Louisiana State University

Daring to Sprint: 3D printing textile
Lushan Sun, Auburn University

Naturally Butterflies
Mia (Mikyoung) Whang, Centenary University

The Spring Bamboo I - Evergreen
Ling Zhang, Central Michigan University

Mystic Girls and Butterflies - CNIII
Ling Zhang, Central Michigan University; and Brent Holland, Iowa State University

GRADUATE, pages 59-79

Inside-Out, Back to Front
Lida Aflatoony, University of Missouri/Columbia

Texture Transformation
Haeun Bang, University of Minnesota

Tiffany Reimagined
Charity Calvin Armstead, Iowa State University

Stained Glass in Three Dimensions
Charity Calvin Armstead, Iowa State University

Depth of Color
Sunhyung Cho, University of Missouri

Armor and Amour
Courtney Leigh Cole, Central Michigan University

Smooth Dynamic
Tianyu Cui, Auburn University

Strata
Kelsie Doty, Cornell University

Life After Death
Kelsie Doty, Cornell University

CIRCUitS
Jenny Leigh DuPuis, Auburn University

Rust
Archana Edmond, Iowa State University
GRADUATE

Comfortable Elegance- Taking Cues from History
   Katie Elizabeth Francisco, University of Nebraska-Lincoln

Celtic Nightshade
   Jason Phillip Gagnon, Central Michigan University

Lady of the Lake
   Jason Phillip Gagnon, Central Michigan University

Made from Scratch. A Sustainable Handbag Made of Bacterial Cellulose Grown in Fermenting Tea
   Armine Ghalachyan, Iowa State University

Balanced Beauty
   Alexis Renee Jones, Central Michigan University

RETHINK III: Bio-Shoes in Urban Campus Life
   Changhyun Nam, Iowa State University

Fusion of Culture and Technology
   Elahe Saeidi, Louisiana State University

Ondine
   April Elisha Stanley, Iowa State University

CatrÃ­ona
   April Elisha Stanley, Iowa State University

Sustainable Fashion Development: Applying Transformational Design
   Bingyue Wei, Oklahoma State University

UNDERGRADUATE, pages 80-117

Incessant Fragility
   Joyce Bao and Regina Mun, Cornell University
   Design Mentor: Huiju Park

Eliza in Plumes of Rose
   Sarah A. Blanke, Liberty University
   Design Mentor: Matalie Howard

Jennifer Lynne
   Audrey Borgert, Miami University
   Design Mentor: Della Reams

Powerful Dancer, Graceful Warrior
   Lia Cernauskas, Cornell University
   Design Mentor: Susan Asashdown

Architectural and Aesthetic Concrete from Recycled Plastic Bottles
   Win Chan, California State Polytechnic University, Pomona
   Design Mentor: Saemee Lyu

Third Eye
   Emily Clark, Iowa State University
   Design Mentor: Fatma Baytar

May All Your Days Be Circus Days: Ringmistressing in Modern Times with an Ode to the Past
   Kimberly Connor and Jessica L. Ridgway, Florida State University

The Bleeding Heart Jacket
   Martha Grace Costello, University of Arkansas
   Design Mentor: Stephanie Kay Hubert

Unveiling Perceptions 2
   Miriam Ennin, Kent State University,
   Design Mentor: Ja Young Hwang
UNDERGRADUATE

Kline’s Ex
Bre Nicole Ferrara, University of North Texas
Design Mentor: Angie Vu

Evening Interlock
Carissa Gooding Columbus College of Art and Design
Design Mentor: Patricia Carlos

La Courtepointe
Carlee Green, Baylor University
Design Mentor: Rachel Eike

A Study in Blue Ensemble
Claire Hider, North Carolina State University
Design Mentor: Traci A.M. Lamar

Through the Shell
Rachel Kwong, Cornell University
Design Mentor: Denise Green

Ring Leader
Stephanie Laginestra, Cornell University
Design Mentor: Susan Ashdown

The Fashion House Jacket
Grace Lian Lawson, Cornell University
Design Mentor: Jooyoung Shin

The Carbon Edition
Lydia Loya, Iowa State University
Design Mentor: Ellen McKinney

Intertwine
Raegan McGuire, Texas Tech University
Design Mentor: Rachel Anderson

UNDERGRADUATE

“d\EVOLUTION”
Julien Remi Nguyen, Gerald Hopper, Kaley McClure, and Jon Rankin, Kent State University
Design Mentor: Margarita Benitez

Astro
Ling Ni, Baylor University
Design Mentor: Rachel Eike

Static Sound
Jamie O’Gallagher, Mount Mary University
Design Mentor: Susanne Maroske

Beauty in the Chaos
Augusta Overy, Central Michigan University
Design Mentor: Ling Zhang

Eternal Nature
Augusta Overy, Central Michigan University
Design Mentor: Ling Zhang

PAWADA
Paula Oyedele-Caleb, Kent State University
Design Mentor: Ja Young Hwang

Unstructured Structure
Arturo Padilla, California State University-Long Beach
Design Mentor: Ling Zhang

What Lies Beneath the Beauty
Alice Palay, Florida State University
Design Mentor: Jessica L. Ridgway

Rarie
Kennedy Marie Rauh, Cornell University
Design Mentor: Denise Green
UNDERGRADUATE

The Beginnings of a Dress
Lauren Reggi, North Carolina State University
Design Mentor: Andre Julian West

Street Serenade II
Gianna Ross, Centenary University
Design Mentor: Mia (Mikyoung) Whang

Sands of Time
Margaret Schneider, Central Michigan University
Design Mentor: Ling Zhang

Teotl
Margaret Schneider, Central Michigan University
Design Mentor: Ling Zhang

Underwater Fantasy
Lindsay Sharpe, University of North Carolina at Greensboro
Design Mentor: Seoha Min

Denim Blue
Kaylin Rose Hagerman and Soyoung Jenna Song, Central Michigan University
Design Mentor: Kaylin Hagerman

Persistence
Samantha Leah Stern, Cornell University
Design Mentor: Denise Green

Power
Damien Tobi, Columbus College of Art and Design
Design Mentor: Rebecca Robinson

UNDERGRADUATE

Oscillation
Laura Vetil, Anne Porterfield, North Carolina State University
Design Mentor: Andre West

Kaleidoscope
Brook Wallace, Emily Sanders, Maria Zarina Domingo, and Yelei Yang, Kansas State University
Design Mentor: Yingying Wu

Spirit of the Fun House
Katherine Williams, Cornell University
Design Mentor: Susan Ashdown
This piece was created at a live event titled, Design Studio Live: Fashion and Art. This event was a performance that was held during the First Friday Art Trail, Charles Adams Studio Project Galleries, Lubbock, Texas. The concept was to meld fashion and art by bringing several artists and fashion designers together in one space. There they created individual and collaborative pieces throughout the evening. Over 1500 visitors wandered in and out of the gallery observing, interacting, and perceiving the design process. The audience included undergraduate and graduate art students, fashion students, the general population, artists, and academics. The concept of the dress involves a hand printed textile collaboration with printmaking artist, Chad Plunket and use of innovative and sustainable draping practices.

Rachel Anderson, Texas Tech University, Chad Plunket, LHUCA Center for the Arts, USA
Inspired by the bold geometric styles of the Viennese Secession art movement, this dress/tunic addresses demands in “The Human Ecology Fashion Design Manifesto”: it is conceived to be worn in different ways. It is multisize. It can be worn by different age groups and body types; and care is given that comfort is as important as aesthetics by assuring a wide walking stride and variability of cinching below the bust. I aimed for elegant daywear that reflects our casual mindsets and our need to reduce consumption. By selecting more serviceable garments worn for a longer time span, we may live more sustainable lives.

Secessionist Reformkleid: Striped Day That Converts to a Tunic

Anne Bissonnette, University of Alberta, Canada
Time and Cloth is a collaboration between artist and draper in the creation of singular elemental statements in women's apparel. The work is reflexive; one creates the textile and one creates the garment, responding to one another’s process to generate original designs. Combining objectives to experiment with discarded materials and to create zero (material) waste instills natural constraints and inspires work within the confines of each fabrics’ unique surface design and dimension to arrive at an aesthetically pleasing and wearable garment through couture techniques. The outcome of this collaboration is an unspoken conversation between surface design and wearable form.

Catherine K. Blumenkamp, Trish Ramsay, Sam Houston State University, USA
Currently, maternity clothing is treated as fast fashion meant to be discarded after each phase of pregnancy. While apparel choices for women during pregnancy have become more fashion forward, there is a need for more sustainable and adaptable maternity clothing that can be worn longer and is suitable for a variety of occasions. One of the sustainable methods that many designers are exploring is zero waste design, in which garments generate zero textile waste during production to minimize fabric scraps and increase efficiency. The purpose of this design is to explore sustainable and marketable design methods for maternity wear. Utilizing the strategy of zero-waste, fashion technology, and outcomes of an online survey, this design considers maternity wear with longer lifespans that can be worn before, during, and after pregnancy thus minimizing both pre-consumer and post-consumer textile waste.

The Carnation Coat

Chanjuan Chen, Kendra Lapolla, Kent State University, USA
As a sustainable strategy for fashion design, redundant or damaged textile waste can be refashioned and add new value through the process of upcycling. While designers can remanufacture fragments to create original garments by making use of this post-consumer waste, one challenge is to standardize one garment into a set or series as conventionally designed and produced clothing since material supplies are irregular and quantities unpredictable. Previous studies have explored the use of secondhand men’s tailored jackets and neckties to recreate evening wear by utilizing inspirations from Chinese cultural elements. This design is a continuation of study on the use of upcycling combined with the concept of cultural inspiration to further determine the potential of production efficiency in upcycled designs. Furthermore, all the pieces from the original jackets have been utilized to create the design, despite small trimming for appropriate fit, in order to prevent any further textile waste.

Rebirth II

Chanjuan Chen, Kent State University, USA
Alaskan glaciers floating down to the mid-mountain and iceberg floating on the sea inspired this project. The design purpose was to express the organic force of flowing glaciers with their layers of cracked ice. The blue background with its structural shape contrasts with the silver trimming to emphasize the huge, cold, and sharp concepts of glaciers. The layered organza pieces express the mystique of glacier shelves and the transparent effect of ice. The irregular tucks signify the cracks, while the irregular hemline symbolizes the sharp shapes. The descending stream of stones with a gradation effect accentuates the flow and floating. Tie-dyeing created the blue gradation. The silver edges were completed by interlocking technique. Ten pieces of the 12” to 80” rectangular with bias grain were layered using a draping technique, creating the dress shape and symbolizing layers of ice. This dress is best suited for high-profile event such as The Academy Awards.
Perspectives for ideal beauty have undergone changes according to the times but an hourglass silhouette still maximizes the beauty of a female body. New Look in 1950s expressed an aesthetic ideal of the end of the 19th century, and also a lot of designers including Christian Dior and Alexander McQueen created beautiful dresses with a fit and flare silhouette. I made an underskirt Mujigi worn to swell an outer skirt into a dress with a view to expressing the beauty of a female body only by many pleats and layers without a body-suppressing corset or a hoop. This project aimed to realize the principle of the symmetrical balance through knife pleats from polyester organza using one of design elements, line, in particular a rigid vertical line. However, a soft feeling of a curve was also expressed along with pleats naturally fallen to the front following a bodily curve. Besides, such a curve also took a bisymmetrical shape. In addition, unity, one of design principles was realized using less saturated red for the entire tone. After folding knife pleats from 44 inch wide polyester organza at an interval of 1 5/8 inch, inverted pleats were made by connecting two pleats to the center with Frenchseam. At the front, inverted pleats set was overlapped fourfold and connected to an inverted shape of the Mujigi skirt, giving the breasts more volumes. The back is composed of two layers. The first layer ensures a form of the back through connecting inverted pleats made from two knife pleats to the front and the outermost layer was made to fall backward to give hips a full volume like a bustle. A shoulder strap was attached to support several layers and a sash was tied to the inside layer of the back in order to fix from the inside. An edge facing up was wrapped with a ribbon in order not to come loose.

Sun Young Choi, Korea National Open University, South Korea
Grid was an auxiliary device used for depicting an object with perspective in the Renaissance era. However, in the 20th century’s modernist art, grid was objectified as the most basic form creating a figure rather than a device for representation. Besides, in the postmodernism, grid reference absent and narrative impossible (Krauss, R. 1981) ensured autonomy of art freed from tradition and custom of the past. This project was planned with a view to creating a new type of dress independent of tradition and custom of dress by pleating to form a grid and repetition. Repetition performed by the grid must follow the actual and empirical surface of the work. As shown from Rosalind Krauss above, with an act of repetition or replication as the original occasion of its usage, the extended life of the grid in the unfolding progression of the work will be one of still more repetition (Krauss, R. 1981). This dress was designed to form a grid in the side by overlapping the radial front and the back created with sun burst pleated transparent polyester organza through a transparent dress form. Meanwhile, radial shapes on the front and the back emphasize a direction spreading to space and express sublimity and infinity.

Rojo Mistral was developed from pre-consumer textile waste (discarded textile scraps) from university apparel design workrooms. The versatile dress, including removable red tube skirt and neckpiece, were originally discarded and then upcycled to create wearable design. Rojo Mistral employed a ruffling textile surface design technique where narrow strips of discarded scraps were sewn together to form long continuous lengths, and then gathered and pleated to create evenly distributed ruffles for decorative application. Ruffle design application and shaping of pattern pieces were inspired by the strong Mistral wind that blows from southern France into the Gulf of Lion. The negative space left between the swirling rows of ruffles creates visual movement for the viewer through the contrast of black and red while delivering an interesting aesthetic for the wearer. Textiles utilized in design primarily included synthetic fibers in knits, twills, plain weaves, and satins to name a few.
Bogolanfini in Leather was inspired by the traditional art of bogolanfini (mud cloth), dating back hundreds of years and was first created by the Malian ethnic group, the Bamana. This technique of textile dyeing with boiled leaves and fermented mud, takes place in several stages. The process of creating authentic banfini is a highly intricate affair, which is indigenous to Mali; therefore, my goal was to create a similar look with alternative media. I designed a cape using sleek, shiny black leather with rust and white suede pig skins as appliques and a coordinating skirt. The contrasting colors chosen for my media made a powerful design statement that is reminiscent of Malian Bogolanfini. This piece brings traditional art into contemporary times while honoring the history of the age-old technique.
My scholarship with natural dyes is merging with textile and apparel design for green burials. I was introduced to green burial garments while participating in the Halfscale Forum for Creative Patternmaking initiated through Cornell University. Thus, this green burial design addressed the Halfscale theme Inversion, of viewing the body and patternmaking from atypical points of departure. I elected to design from the back, supine position wrapping the fabric around the body and limbs using gathers on slits, ties, lacings, and casings to secure the shape using seams minimally. The fabrics were dyed and printed with local garden plants through solar bundling and plant pounding.

Sherry Haar, Kansas State University, USA
This project involves a multidisciplinary team including a fiber artist/textile surface designer, an apparel designer, a Navajo matriarch and traditional weaver, and a multimedia artist. This design was originally developed for Hope and Trauma in a Poisoned Land, an Arizona exhibition where invited artists explored the impact of uranium mining on Navajo lands and people. The two designers incorporated the work of a skillful and revered Navajo weaver who has herself experienced the personal trauma of uranium in her family and on her land. Through her weaving, she told the story about how the very fabric of Navajo family and tribal lives were permanently changed because of uranium toxicity. The second designer then created nuno felt fabric that harmonized with the weaver's rug. The first designer then created a contemporary outfit, infused by all of the fabrics and design elements, relying on traditional Navajo garment style.

Kim Hahn, Kent State University, Ann Collier, Northern Arizona University, USA
The purpose of this design was to create a jacket and skirt as a critique on the absence of unapologetic and powerful design in contemporary fashion. The source of inspiration for this design was Gregory Prestegord’s Building in the Rain painting: the look of rain falling down the side of a skyscraper. Beading techniques were used to convey this vision by attaching lines of seed beads to the sleeves of the jacket in a waterfall pattern. The design and construction process for this look includes creating foundation patterns, using pattern techniques from Shingo Sato’s Transformational Reconstruction to achieve my design and incorporating advanced sewing techniques to construct it. This look combines traditional tailoring and couture sewing techniques with innovative pattern design with a powerful style.
Bete Noire: Extreme Asymmetry  Design goals were; 1) use asymmetrical visual strategies and curvilinear lines to balance the client’s extremely asymmetrical body, and 2) do so by recreating a 1920s red and black silk velvet dress. Past design research explored the use of curves for decorative and fitting purposes. Here curves were used as a tool to mask physical asymmetry. The original garment panels were cut apart. Flowers, leaves and vines were separated individually and hand-appliqued to emphasize the curvilinear motion created by the black polyester velvet curve. The curving, wave-like asymmetry of split panels, s-shaped velvet band and carefully positioned appliques mask the client’s asymmetrical body and successfully re-use a vintage garment. Panels were edged in flat velvet piping. The rest of the garment is silk chiffon. The silk charmeuse lining is clean-finished and hand-applied. The ensemble includes a silk knit created as one pattern with only a front seam.
Cellulose is one of the most popular natural fibers in the textile and apparel industries. The cultivation of cotton can have negative impacts on the environment. For example, over 20,000 liters of water is needed to produce enough cotton for a single pair of jeans and a T-Shirt. Bacterial cellulose is a promising material that has experienced limited application in textiles. The purpose of this piece was to explore different growing containers, drying methods and post growth treatments to improve the tactile properties of bacterial cellulose and explore the apparel potential of this material. The bodice components were air dried and dyed with a water, glycerin, vinegar and beet powder solution. This material feels like vegetable leather to the touch. The skirt and waistband pieces remained undyed and were freeze dried. These skirt pieces are softer to the touch than the vegetable leather.
The purpose of this project was to develop a design using digital textile printing on organza fabric and op art inspiration. Additionally, the aim of this project was to create a sensible, ready-to-wear garment, which could potentially be sold at any large retailers. The design was developed by creating digital geometric shapes of different sizes using computer aided design tools and digital textile print.
This design is part of an 8-piece collection. The challenge of this collection was to combine the aspects of nature and technology, while also mixing different prints to create aesthetically-pleasing designs. Physical samples of flora and fauna were collected and microscopic images were taken. The images were then edited minimally in Photoshop and used to create digital textile prints. In some cases the images were repeated across the fabric, and in others the print was engineered to be the size needed for the pattern piece. The images for this design were taken from the leaves and bark of the aspen tree and the needles of both the blue spruce and lodgepole pine trees. The concept of biomimicry inspired the shapes and silhouette of this design. The silhouette of the dress was inspired by the triangular shape of the spruce and pine trees and the layers on the skirt represent the layers of needles of these trees.

Erin M. Irick, University of Wyoming, USA
My design scholarship is rooted in the translation of natural movement, texture and phenomena into original surface and textile design. Oyster Shell is the second in a series of garments dedicated to the natural elements found along the Oregon coastline. The aim of this project is to translate the surface design of a golden oyster shell on the beach into a garment. I chose to sculpt the body of the jacket out of Worbla’s Finest Art. Worbla is a thermoplastic material that can be shaped and adheres to itself when heated. The overall silhouette of the ridges and structure were first built up on a dressform using plastic wrap and duct tape. Once the form covered, the Worbla was sculpted directly on the form. The overall goal with the silhouette of the piece is to make the wearer appear that they are wearing an open oyster shell.

Laura Kane, Framingham State University, USA
This dress was created to increase awareness of the global air pollution issue and to emphasize our cooperative efforts to better the air quality. The abandoned air filters were recycled and rebirthed to create an elegant, romantic, and energetic dress. Just like combining people’s hopes and efforts one by one, the small pieces were connected to create a hopeful, blooming dress. The interesting textures of the air filters encompasses the airy, lightweight dress, and delivers the hopeful message. The dress was made through sustainable construction methods such as zero wastes. This design explored a new material, air filters, recreated into interesting textures. A special construction method was utilized to make the dress using the new material.
In this creative design research, the origin of slashing as a design detail that trended during the Renaissance period was investigated and interpreted to explore this design process. The main characteristic that I intended to deliver was a contemporary look that also conveys a strong concept of the bitter legacy of the era because, during the Renaissance, slashing was in fashion as an unintentional development after returning from the battlefield. I used an abundant slash decoration, along with a silver crinkle surface texture, glittering silver powdered surface, and silver and black transparent surface to express the spirit of the Renaissance fashion, which was considered an impressive display of luxury. Furthermore, a great amount of slashing over the jacket’s bodice was created in a traditional way, but the horizontal slashes with ribbon interlacing over the sleeves and skirts was intended to convey a contemporary look.

Youngjoo Lee, Georgia Southern University, USA
The purpose of this design was to create sustainable clothing and help prevent fabric waste by repurposing old and used t-shirts. The dress incorporates bohemian styles that bring a free spirit and happy mood to the garment. This dress is made with my husband’s old t-shirts; the old ones with holes and stains that served years of purpose, but had reached the end of life. The t-shirts were cut with hundreds of stripes. Then, the dress was made using several hand weaving and knotting techniques, such as basket weaves for overall garment, backward and forward knots for waist and hem areas, and a three color fishtail for the shoulder straps. The dress was made directly on the dress form, and with the exception of the sown on hooks on the back, there was no sewing or needle engaged in creating the garment.
The purpose of this design was to create sustainable clothing and help prevent fabric waste by repurposing old and used t-shirts. The dress incorporates bohemian styles that bring a free spirit and happy mood to the garment. This dress is made with my husband’s old t-shirts; the old ones with holes and stains that served years of purpose, but had reached the end of life. The t-shirts were cut with hundreds of stripes. Then, the dress was made using several hand weaving and knotting techniques, such as basket weaves for overall garment, backward and forward knots for waist and hem areas, and a three color fishtail for the shoulder straps. The dress was made directly on the dress form, and with the exception of the sown on hooks on the back, there was no sewing or needle engaged in creating the garment.
The inspiration for Validated Flower comes from the whirly shape of flower petals. Validated Flower uses only two pieces of fabric, light-colored organza (with a tone on tone color combination); the two pieces of organza fabric were used to construct the shape and volume of the dress. Validated Flower is built on a zero-waste sustainable design concept, which uses only rectangles to construct the flower. There are three main categories of fabric waste creation: 1) cut-and-sew, of which zero-waste fashion design is part; 2) fully fashioned, which includes whole-garment knitting; and 3) A-POC. Of course, Validated Flower has included the cut-and-sew category. The crumpled and crispy organza of Validated Flower is used to shape the flower petals, and the creased and folded shapes have formed the volume of the garment. Thus, the seams and finished edges of Validated Flower needed to be part of the design process throughout. Leaving them to a late stage in the process would not have worked, as they have specific implications for the pattern pieces.

Validated Flower is very much a three-dimensional way of viewing the dressing of bodies that has much to offer the field of zero-waste fashion. During the design process of Validated Flower, zero-waste blocks were modified to produce the desired design details, fit, and fabric width of the final dress. The primary effect of the creation of this natural mini dress, Validated Flower, has been an insight that the vertical and horizontal guidelines used in the prevalent discourse of pattern cutting have very little to do with the actual physical body and the fabric that dresses it. This process of applying these shapes to a dress form is more akin to sculpture than to drape. A number of vertical pleats through the neckline in the back of the dress provide volume throughout the body. In addition, Validated Flower has mainly been displayed as a guideline for draping practices and for creating a general understanding of the moving body as it interacts with garments; it does this as a one-size-fits-all garment by using an elastic band on the back of the dress at the waist in order to account for size differences. Validated Flower is a flexible blossom.

Yoon Kyung Lee, Seoul National University, South Korea
La Belle Lute, which translates to "The Beautiful Struggle" was a collaboration amongst two colleagues who used both new technologies (3D printing) and traditional textile creation (hand-knitting) to create a wearable garment. Inspiration for this design was pulled from Gothic architecture and armor, the stories of Joan of Arc, and the battles that women of today continue to fight. Using a combination of these sources, La Belle Lute was created with a silhouette that encompasses power, strength, and artification, and that has details representing a balance of feminism and fortitude. This piece of work is one that not only highlights the combination of newer technology with traditional textile creation, but also reflects upon history and contemporary events.

Stacey Rochelle Lim, Rachel Pastor, Central Michigan University, USA
The purpose of this ensemble was to fuse the concepts of engineered digital textile printing, quilting, and zero waste design. Drawing inspiration from my grandmother’s creative and efficient use of the fabric she had available to create beautiful quilts this design worked to reduce waste in pattern cutting and construction. This work also found solutions to problems previously cited with the zero waste tessellation method.

Star Flower Remade

Addie Martindale, Georgia Southern University, USA
The purpose of this design was to create an environmental activist art wear ensemble using apparel and home decor industry bi-products to bring attention to the affects of global warming on the ocean. The design framework draws from the cradle to cradle tenet of waste equals food in both the sourcing of materials and the compostable nature of the garments natural fiber composition. Both fabric manipulation and macrame techniques were used to create a portable visual representation of the growing problem of coral bleaching and its impact on ocean life.

Achromatizing Effect

Addie Martindale, Georgia Southern University, USA
The purpose of this design was to create a jacket and skirt as a critique on the absence of unapologetic and powerful design in contemporary fashion. The source of inspiration for this design was Gregory Prestegord's Building in the Rain painting: the look of rain falling down the side of a skyscraper. Beading techniques were used to convey this vision by attaching lines of seed beads to the sleeves of the jacket in a waterfall pattern. The design and construction process for this look includes creating foundation patterns, using pattern techniques from Shingo Sato's Transformational Reconstruction to achieve my design and incorporating advanced sewing techniques to construct it. This look combines traditional tailoring and couture sewing techniques with innovative pattern design with a powerful style.

Ellen McKinney, Fatma Baytar, Kathryn Kaalberg, Shannon Roth, Chanmi Hwang, Iowa State University, USA

Solaris: A unisex solar-powered jacket for the day hiker
This design is a juxtaposition of the interpretive study of eighteenth century historical fashion and contemporary ideal body image. The fashions of the eighteenth century transformed the female body into the de rigueur silhouette of the era. In contrast, the body itself became a powerful medium of expression in the twenty-first century fashion. During the 1700’s, the female body was manipulated with the use of elaborate devices, layers of understructures, and foundations to hide and alter the woman’s true physique, where now the body itself has become the fashion. Today, it is possible to transform the appearance of the body through diet, exercise, cosmetic treatment, and plastic surgery. The Transparent Pannier design reveals the architecture and engineering of the pannier to the viewer. The figure of the wearer is exposed and enhanced by the lines of the design and the aesthetic sense of the pannier.
The contextual review for this design originated from the investigation of Rickard Lindqvist Kinetic Garment Construction Theory and his Shirt/Sphere design. Lindqvist theory is a method of garment construction that instead of using a traditional construction method of working inward by considering fabric or pattern first, Lindqvist method works from the body outward. In keeping with his theory, movement of the wearer’s legs and interaction with the fabric were considered with this design. This project evolved into a design that features a skirt that originates from the underside of the dress to transform from long to short. Review of transformative design reveals that they not only transform from long to short but can also grow, change, re-figure, reform, or re-structure. Transformable garments involve technologies that can convert them into different styles or silhouettes, thus reducing the need to purchase new garments and extend the garment’s lifecycle.

Transformation Inward Out

Colleen Moretz, West Virginia University, USA
Clothing for transgender people can promote gender expression, decrease social stigmas, and improve body image during periods of transition. This ensemble was created for females who are transitioning to male (FTM) and is the first design concept from a larger research study that employed Photovoice, a user-center design methods to pinpoint specific apparel ideas for the FTM community. Thoroughly researched, this design scholarship conceptualizes many apparel features specific to FTM so transmen may proudly express their gender identity and promote transgender awareness and visibility. All pattern manipulations were completed on blocks created to specifically fit FTM bodies. Many details address requirements of FTM and the garment features and aesthetics of Visible represent both the symbolic and functional requirements of transmen.

Visible - Trans Positive Apparel

Kristen Morris, University of Missouri, USA
This running ensemble, which was developed with runners and further conceptualized by the designer, addresses runners' concern for safety during runs in low light conditions. The running top, together with the vest, meet the criteria outlined by runners in initial design sessions held with over 64 runners. This running ensemble was designed to improve visibility while maintaining thermal comfort for the wearer. Two stages of evaluations by users further ensured that the product developed in this research met the needs of users. The design included technical features like storage pockets on the back with reflective tape, thumbholes, and a zipper at the neck that could be unzipped to help with thermal management. Reflective mesh fabric that uses micro glass beads to create the retro-reflective effect was used throughout. Patterns were drafted by hand, digitized into Optitex PDS and cut using a laser cutter to ensure cutting accuracy and efficiency.

Kristen Morris, University of Missouri, USA
The aim of Lucent Two was to create a breathable and lightweight apparel solution for runners while running in humid climatic conditions because many rain jackets cling to the wearer’s skin and become very uncomfortable. This performance running piece protects against rain through the use of silicone-impregnated ripstop nylon used as the outer shell. To keep the fabric off sweaty skin and increase ventilation, the garment is constructed with two layers where the outer layer on the upper body floats freely on top of an underlayer made of mesh. Many other functional details elevate the design of this jacket. The inspiration for the aesthetics of the jacket was drawn from Nick Veasey who creates x-rays of fashion items. By using ripstop nylon, and layering different translucent blue shades the designer was able to create an x-ray type effect when the garment is backlit.

Kristen Morris, University of Missouri, USA
Changing Perspectives

In this ready-to-wear design the idea was to use a Stoll ADF 7.2 gauge industrial knitting machine to create a design that was ready for production. The main challenges were to limit the use of seaming for shape as well as limiting the waste through creating a piece shaped on the machine. The dress is knitted sideways starting from center back and knitting all the way around the dress creating sleeves and armholes without seaming and using short rows in order to be able to add flare around the bottom and a closer fit around the sleeves and neckline. The design was programmed using the Stoll M1+ software and knitted in 14 gauge using overstock two overstock cotton yarns and one overstock polyamide yarn.

Linda Ohrn-McDaniel, Kent State University, USA
Spiraling through Generations -- a dress starting from the idea that culture and craft lives and forms through generation. This gave the idea of working in a cross generational collaboration with my grandmother, (Greta Stenbom, age 91) my mother (Inger Ohrn,) and my two children (Jonathan, 5 and Justin, 3). I started this design by draping using two spirals to create the fit and shape of the dress. I choose two linen fabrics; a hand woven sheet, and a new piece of cloth. Then handed the fabric with basted pattern shapes to my mother, who tie-dyed the fabric following the pattern shapes. After the tie-dyed pieces were complete, we together designed an embroidery carried out by my grandmother and my two children. It was a great process enjoyed by all involved, but also a memory that will be cherished for years to come a meeting of creativity across four generations.
This asymmetric denim jacket and silk and cotton wrap skirt is a study in sustainable design. The jacket was designed using upcycled Levi jeans. Worn jeans were partially disassembled and pieces draped on a dressform to develop the design. Pant legs transform into kimono sleeved and upper and lower back sections. Waistbands were used for the neckband and decorative wrap belt. Hems and seams are stitched in gold cotton thread. Cut edges were finished with a shibori printed cotton. Sashiko embroidery in navy and gold rayon yarn adds emphasis to the jacket. The hand dyed indigo wrap skirt is a zero-waste garment designed using two fabric rectangles. The silk satin organza outer skirt features nui shibori along the lower border. The inside layer is a remnant cotton sateen and has a nui shibori border on the inside center edge.

Belinda Orzada, University of Delaware, USA
The purposeful consideration of sustainable design criteria and processes move sustainable design to the next level. This ensemble combines three sustainable design practices: a zero-waste silk kimono top, an upcycled sweater skirt with matching leg warmers, and a naturally dyed silk scarf. The zero-waste, kimono-sleeved top of grey silk shantung georgette was quilted with a fine layer of polyester batting. Parallel lines were stitched with a double needle 1-inch apart across the width of the fabric. Drafted geometric shapes provide the pattern design for this top. The upcycled sweater skirt provided a creative challenge element. I challenged myself with the thoughtful deconstruction and creative transformation of a sweater into a new garment through the addition of crochet to reshape the sweater into a skirt by filling in the neckline, and finishing the edges. The crepe de chine silk scarf was nui shibori resist dyed with black rice dye.

Upcycle and Zero Waste Ensemble

Belinda Orzada, University of Delaware, USA
The Three Rs: Reclaim, Reuse . . . Really

Reusing textiles has practiced because of their value and/or scarcity. Today the motivation is for waste reduction. This project reclaimed/reused textile products that would have been discarded. Thread and muslin reclaimed from flour sacks were repurposed into a jacket. Contrasting-color labels were harvested and treated like patches. Visual repetition of shape and colors achieved unity. Sacks were deconstructed; these rectangles were topstitched into bands. The jacket was connected using topstitching. The jacket’s canvas base was adorned with the vertical flour-sack bands emulating suspenders. The convertible collar, comprised of two sacks, is faced with muslin. New textiles commensurate in colors and textures were combined with the reclaimed. Together they were redefined. This design illustrate true recycling by reclaiming then reusing textile entities that would otherwise have been discarded.
After years of creative scholarship, the designer’s home is full of wasted materials: half-finished prototypes in full or in half scales, fabric scraps, and extra parts from previous designs (e.g., different sizes of birds’ wings, various flowers, peacock’s tail eyes, tree branches, leaves, and decorative shoes). The left-over materials came from different design projects, which were inspired from various resources. The designer’s goal was to create a sustainable design by utilizing the old wasted materials and to combine different sources of inspiration into a single workable design. Therefore, the purpose of the current design was to be sustainable and creative: combine left over parts from previous design works (sustainability) and seamlessly integrate various sources of inspirations into a single creative dress (creativity). To make sure the design parts from different inspiration sources combined seamlessly, principles of design were utilized. Only white cotton fabric was selected to make sure the entire dress color was unified. In addition, the designer chose all design parts related to a forest (e.g., flowers, grasses, trees, and birds) and gave up parts that were not related the nature (e.g., white decorative shoes). Furthermore, in the process of making the dress, the designer applied symmetry and balance on the top’s left and right sides. At the same time, to create contrast effects, the top was tight fitting and the bottom was loose fitting, and the top was mainly with wings and the bottom was mainly with tree branches and peacock’s eyes.

Anna Perry, Colorado State University, USA
The current design was inspired by an owl’s body shape: big eyes and a rounded body. The purpose of the design was to create an aesthetically pleasant novel dress shape based on the owl’s body shape. This design’s top and bottom have a contrasting effect (an upside-down triangle shape vs. oval shape), but the left and right have a symmetrical effect. The focus points are the owl’s black eyes, which were contrasted with the entire white dress. Hundreds of feathers with gradually changing shapes were placed on the left and right wings, creating a rich layer’s repetition and rhythm pattern. Visually, this design created an overall harmonic effect.
The purpose of the current design was to combine left-over fabric scraps, extra design parts, and some new materials to make a new design.

Chinese Red in Spring

Anna Perry, Colorado State University, USA
This design used the neurological phenomenon of synesthesia as an inspiration for creating the textile print. The design challenge sought to emulate this phenomenon through the creation of a textile print, which embodies color hearing through the depiction of sound as color. This type of emulation is known as psychomimicry. The song Bridal Chorus was used as a road map for creating the digital textile print. The end result is a striped digital print that visually depicts the sound of Bridal Chorus in color. Historical references were used as the inspiration for the color and silhouette.

Jessica L. Ridgeway, Florida State University, USA
Ommatidia is made up of a tent style dress and an oversized jacket. The goal of this design was to experiment with a variety of surface design treatments to create original textiles. The dress in this ensemble was inspired by the individual round sections of an insect’s compound eye, or ommatidium, which function as separate visual receptors. This concept was used to create the original pattern on this dress, which was completed using an eight-color screen print. The jacket was inspired by the hard shell of an insect, like that of a beetle. These shells are often made of mesmerizing patterns and colors and serve as protection for their owner, much like outerwear protects the consumer. This geometric pattern was first designed on Adobe Illustrator. The necessary shapes for the print were laser cut from neoprene fabric, draped onto the finished garment, and hand stitched into place.

Ashley Rougeaux-Burnes, Texas Tech University, USA
Dichotomy is one of the creative outcomes of a research project that aims to examine the physical and conceptual relationship between dress and body in various socio-cultural contexts and ultimately to define the ways in which dress is established based on different perceptions of body in terms of meaning and form. This design project focused on capturing the visual dynamics and formative balance by a marriage of antithetical design elements in one garment: 3-dimensional body-conforming versus the 2-dimensional body-defying shapes, fixed vs. transformable, revealing vs. concealment, and finally West vs. East. Visual weights of each element were carefully measured and strategically placed to achieve symmetrical balance within extreme asymmetry. Another design principle for Dichotomy was versatility of the shape. The left side of this dress transforms into a variety of shapes and sizes by adjusting the volume of gathers with a drawstring inserted on the top edge.

Jooyoung Shin, Cornell University, USA
Members of Eastern and Western cultures have substantial disparity in their understanding of the body. Consequently, a distinct dress-body relationship has evolved within each culture. Western dress physically frames the body and reflects the perpetual change of ideal body. In this way, it has never been free from the body. Unlike its Western counterpart, the Eastern dress displays an independent relation to the body. Dress seldom dictates the body’s shape. Inspired by such dress-body relationship, Metamorphosis aimed to use innovative design principles to represent the visual dynamics of deconstructing the fixed boundaries between dress and body. Three-dimensional printed hexagons and triangles were devised to allow a continuous transformation between 3-dimensional body-conforming and 2-dimensional body-defying silhouettes of the garment. This design project realized different dress-body relationships established in the Eastern and Western cultures and demonstrated how cutting-edge technology could broaden the spectrum of creativity and increase feasibility through the design process.

Jooyoung Shin, Cornell University, USA
The focus in this submission is the Surrealist landscape textile design. Emphasis was achieved through digitally manipulating color vibrancy and contrast in the artwork used for the silk textile. Garment structures were held at a minimum level of complexity to emphasize the textile design. Traditional draping techniques were used to create garment patterns, and couture techniques were used to assemble and finish garment structures. This design follows the precedent of a relationship between fashion and Surrealism established in the 1930's by Elsa Schiaparelli and Salvador Dali. It is different, in that the textile design process was done using digital technology. The contribution to the literature provided by this submission, is a unique textile design and garment structure that visually demonstrate the potential for dress designing to be a manifestation of art.

Diane Sparks, Tyler Klene, Colorado State University, USA
Elevating Scraps

This piece began with a large donation of fabric samples from a local furniture store to the designers university. Therefore, the purpose of this design was to create an up-cycled garment from pre-consumer textile waste utilizing a historic inspiration process as a statement about sustainability. The worn look of the samples, some even featured silver grommets and holes for hanging, brought to mind historic garments. The second source of inspiration came from the tonlet walking armor of Henry VIII. The designer cut all the samples into 2” strips and created a simple tent-shaped pattern for the vest using draping. Small amounts of leather remained after the vest was constructed. Thus, the designer decided to create laser cut leather flowers to adorn the hemline. A dress was created using flat pattern to go under the vest. The dress was constructed from an antique linen sheet.

Casey Stannard, Louisiana State University USA
Since the 3D printing (3DP) technology took off in the textile and apparel industry worldwide in the recent years, an increasing number of designers have been exploring new ways to print wearable material. This design research aims to explore alternative 3DP material for wearable product. Daring to Sprint is inspired by fierce spirit in the athletes and activewear and experiments with specially FDM nylon filament and various 3D modeling approaches. The ensemble consists of a bra top and a pair of compression pants using both compression knit and 3D printed nylon textile. The textile design is digital printed using photographic engineered print techniques. The 3D printed textiles were printed in semi-translucent color and later dip dyed (Rit) in gray and pink to achieve an ombre affect for design cohesion. The findings in this research suggest the great potential in treating 3D printed textile material the similar to traditional fabric in using common sewing techniques in garment construction.
This two piece ensemble implements slow fashion through applique, hand embroidery, beading, and natural dyeing, targeting the designer market. With an emphasis on high quality workmanship, which slows down the design and production process, slow fashion achieves sustainability by creating fewer but more emotionally durable clothing. Inspired by the 50s glamorous look, I decided on a mermaid silhouette. The skirt was draped while the jacket was created using the flat patternmaking. The jacket with a V-shape built-up neckline along with a raglan style is harmonized well with the gore of the skirt’s high low design. 100% cotton velveteen was used to create the surface design, inspired by butterflies’ shapes and colors. Physical resist techniques were employed to mimic their patterns using natural dyestuff and lace. Butterfly motifs and appliques were applied on the ensemble using hand embroidery and beading. The ensemble was fully lined with materials dyed in an exhaust bath.

Naturally Butterflies

Mia (Mikyoung) Whang, Centenary University, USA
This design was inspired by the Chinese painting, The Spring Bamboo, drawn by the designer’s father who lives in China. The purposes of creating this design were to: (a) experiment the Chinese ink as the silk painting material on the wearable art and (b) fuse the aesthetic concepts of Taoism and the symbolization of the bamboo in Chinese painting with the Western garment silhouettes. The designer tested the feasibilities of using Chinese ink as a textile painting medium on silk fabrics using protocols from the AATCC. To fully convey the spirit of the inspiration painting, and the meaning of the bamboo in Chinese culture, the designer used only black and white to represent the believes of Taoism. The center panel with different sizes of a triangular shape presents the hollow inside of the bamboo stalk using a folding technique and hand painted with Chinese ink and embellished with black beads.

Ling Zhang, Central Michigan University, USA
This dress was inspired by an experimental drawing titled CN-III, which used figurative representation and formal abstraction upon time, space and the sphere of existence of the artist via multilayered mediations. Thus, the purposes of creating this piece of wearable art were to: (a) experiment utilizing fabrics to emulate spatial relationships and (b) explore digital textile printing, 3D printing technologies, and handcraft techniques to transform a two-dimensional drawing to three-dimensional garment. The designer used digital textile printing technology as the main design concepts to transfer the CN-III drawing onto the fabrics. Three layers of the printed fabrics represented the multilayered mediations. The shoulder pieces were 3D printed that also inspired by the shape and patterns appeared in the drawing. The died butterfly wings embellished on the dress to enhance the 3-dimensional effect. The final garment serves as a physical record of both the artist’s and designer’s visual experience.

Mystic Girls and Butterflies - CNIII

Ling Zhang, Central Michigan University, USA
This design concept, Inside-Out, Back to Front is part of an ongoing qualitative research project that investigates tactile design strategies for vision-impaired people. According to the statements of the participants of this study, they need to touch the neckline of their garments to find the label of the dress to identify the direction of their garment. However, apparel companies sometimes use a stamp or heat-press label instead of a woven garment label to indicate the back neckline of the dress. Labelless garments make it difficult for blind individuals to identify the direction of the garment, especially if the garment has a round shaped neckline as the front and back appears the same for them. Therefore, the design strategy was to create a garment for women that is reversible and at the same time is the same back and front so users can don the dress without worrying if the garment is being worn correctly. Three different patterns were developed to reach the final and desirable result. Each pattern was followed by muslin and fitting test to assess if the garment fits well in both front and back. A shoulder dart helps the garment follow the shape of the body around the shoulder on both front and back. The dart is followed by a deep pleat that gradually expands towards the hem of the dress. The pleat can be gathered right below the bust by means of magnets that are sewn inside the garment on both sides of the pleat. In this way, the garment gets shape below the bust. A round elastic cord was inserted around the neck and sleeve hems to fix properly the inside and outer layers to minimize the chance of sliding layers when the garment is worn. The collar of the dress is designed in the way that easily fits over the head, but does not look too large or too small. The raised texture in the form of padded shapes has been used in parts of the dress to assist the user in locating pockets without searching for the pockets for a long time as well as add aesthetic feature to the garment. The materials used in the garment were a 100% wool twill with cut pile backing and 100% cotton twill with a terry cloth loop. Both fabrics are heavy weight and were chosen because they would not wrinkle much.
Recently in the apparel field, the process of up-cycling has been in the spotlight as a sustainable design solution. It gives new life, new value and new purpose to old, unwanted or useless products or materials in creative ways. I visited a local Goodwill thrift store and found four polyester curtains which were not being noticed by anyone else in the store. The first step of transforming was a product disassembling process. The curtains were ripped and transformed into yarns of different thicknesses. The next step was reconstructing. A cocktail dress was created with these yarns by using hand knitting techniques. Different sizes of bamboo needles were used to give different structures. Through disassembling and reconstructing, the old curtains were transformed into a unique yet wearable hand-knitted cocktail dress with new value, new life and new purpose. This project illustrates how the art of craftsmanship can improve the product.

Texture Transformation

Haeun Bang, sponsor: Marilyn DeLong, University of Minnesota, USA
The purpose of this design was to create an engineered digital textile print inspired by Art Nouveau design and incorporating a 1950s silhouette, applique and three-dimensional fabric flowers. The dress was inspired by 1950s styling, with an asymmetrical, lined bodice and a circle skirt digitally printed onto cotton sateen. The bodice was developed using flat pattern technique and the skirt was drafted. The pattern pieces were digitized into Optitex, imported into Adobe Illustrator, and opened in Adobe Photoshop for the design development. After developing the bodice design, I warped it around the darts so that it would continue seamlessly across the darts once they were sewn. The digital print for the skirt was developed using an image of a Louis Comfort Tiffany stained glass window.
The design for this dress transforms a two-dimensional stained-glass design into an engineered digital textile print that conforms to the contours of the body. In examining antique pieces of stained glass, I have noticed that the shrinkage of wooden frames over time have caused some stained-glass pieces to expand outward to form 3-dimensional shapes, an effect that I have used as inspiration for the contours of this design. Rather than referencing historic silhouettes or garment design details, the historic inspiration for this dress was found in Art Nouveau stained glass designs of the early 1900s. The pattern pieces were digitized and printed in half scale. I drew the design by hand onto the pattern pieces, and then used Adobe Photoshop to trace over the hand-drawn design lines and to create half-drop repeat prints to fill the design outlines.
This design transposes verbal descriptions to tactile ones to extend the aesthetic color ranges of people living with vision impairments. Tactile expression of color is a new approach in clothing design that expresses the color without exploiting visual elements. To express the depth of color, the designer employed a laser cutting technique to communicate changes in color hues by creating cutouts from a fabric overlay that has a strong tactile texture to reveal a hand-painted colorful fabric underneath. The designer laser-cut the main textile of the first layer with ellipses of various sizes. The size of the ellipse corresponds to the size of the shape where lighter shades of blue are represented by smaller circles and darker shades are represented by more elongated ellipses. This results in a strong aesthetic effect where the garment represents the deep and lighter colors by the variation of frequency or size of the circles.

Sunhyung Cho, sponsor: Kristen D. Morris, University of Missouri, USA
Armor and Amour is an artistic outcome grounded in French history, namely the interpretation of Joan of Arc, along with the use of modern 3D printing technology. It is a women’s apparel silhouette combining elements of the French heroine’s life, namely, the juxtaposition of feminine youth against the masculine warrior. Using historical armor as a reference, the hand embellishment mimics military garments of the past, with the decidedly modern utilization of 3D printed elements and a feminine touch. It is a work that explores how the past consistently informs the future and is intended to illustrate the strength, resiliency and duality of the female spirit.

Courtney Cole, sponsor: Seung-Eun Lee, Central Michigan University, USA
This case study explores the workflow approach in developing wearable assistive glove for female wheelchair users using 3D CAD modeling program (Rhinoceros), 3D scanning, and 3D printing technology (Fused Deposition Modeling or FDM). This case study was conducted using the qualitative approach and the research through design methodology, and reflexive journal for documentation. One live model is used for modification in the design development. The assistive glove was developed using both traditional textile, medium weight Spandura knit, and 3D printed nylon filament. It consists of 2 portions: 1) the custom fit glove and 2) the wrist protection portion. The fitted glove portion allows the tip of the four main fingers to expose with the thumb closed. Each finger consisted of customized small friction pads to provide better grip and support in handling the wheelchair pushrims. The customized friction pieces on the palm side also further support the gripping motion. They are designed with 3 mm thickness. On the dorsal of the glove, a 3D printed textile design was incorporated to provide aesthetic value for the female users and provide additional heat dissipation. In the second portion, an articulating two-part wrist protection is 3D printed and designed with ergonomic curves. Due to common hand issues in operating the wheelchair, it is designed with two extended panels on the top part and mainly serves as splints to support user's potential wrist overuse, particularly in the palmer side, in the process. The bottom part design and the use of specialty nylon material in 3DP provide the appropriate level of flexibility and wearing comfort. For closure, this two-part articulating portion is secured at the wrist with a knit band that feeds through the bottom part of this wrist protection. It is secured with Velcro attachment at the band. Overall, consistent organic lines are incorporated, and colors and textures (light blue knit and semi-translucent 3D printed nylon) are coordinated into the assistive glove to keep cohesion in the aesthetic aspect of the design. Materials were chosen and designs decisions were made based on glove breathability, ergonomic, and the level of comfort for targeted user.

Smooth Dynamic

Tianyu Cu, sponsor: Lushan Sun, Auburn University, USA
The purpose of Strata was to explore using shredded cotton, linen, and silk from secondhand Eileen Fisher garments and create a fully biodegradable garment using only natural textiles and threads. Inspiration was taken from layered rock formations that can be seen along the roadsides in the Flint Hills of Kansas and the cyclical nature of life, decomposition, death and rebirth. Shredded fibers were placed between layers of 100% silk organza and 100% silk gauze and bonded using heat set fusible web. For the final design, these textiles were layered with ruffled silk organza, inspired by the look of striated rock. The cut edges of silk organza were left raw and purposely frayed to add visual texture. The base garment is 100% linen which has been designed to crisscross over the back to eliminate the need for metal or plastic closures.

Kelsie Doty, sponsor Denise Green, Cornell University, USA
The purpose of Life After Death was to explore using the seam allowances and hems from Eileen Fisher garments in the creation of new textiles and to create a fully biodegradable garment using only natural textiles and threads that could be composted after use. Inspiration was taken from rock formations found in the rural Flint Hills of Kansas and the cyclical nature of life, decomposition, death and rebirth. The vest was created by sewing one-inch-wide channels through two pieces of silk organza, with water dissolvable stabilizer in-between the two layers. The vest pattern was then cut out of the silk organza and cotton, linen, rayon, and silk seam allowances and hems from deconstructed second hand garments were used to stuff the channels.
The purpose of this design research was to explore the integration of wearable light-emitting diode (LED) elements with traditional garment/accessory embellishment and construction techniques. Tacit knowledge of circus costuming involving wearable LED tech informed the basis of the research, and couture beading techniques were employed alongside LED application. The ensemble of a metallic brocade coattress with contrast lining and complementing top hat utilized LED circuitry to illuminate a beaded applique on the back of the coattress. LEDs along the underside of the hat’s brim cast light onto the beading, complementing LEDs residing underneath the beaded applique. Adaptations to existing computer code were employed to adjust the LED programming via an Adafruit FLORA microprocessor, and design challenges resulted due to the designer’s lack of prior knowledge of computer programming. Safety measures against electrocution and conductivity were employed in the form of insulating layers and careful stitching of conductive threads.
The purpose for this project is to explore a unique pattern making technique which breaks the rules of traditional pattern making, making the design fun, creative, and functional. The visual inspiration for the ensemble came from wood carving on ancient Indian doors. The aspect on the doors that caught the designer’s attention were the intricate details and the attention-grabbing juxtaposition of structure to curves. The plan was to combine two opposite aspects and create a piece of wearable art.

Archana Edmond, sponsor: Dr. Ellen McKinney, Iowa State University, USA
This project explores how historical fashion can inform lounge-wear options that are both comfortable and elegant. The project draws on references from the 1910s and 1920s, and explores the use of silk crepe for a design that is functional and aesthetically pleasing. The blue and black brocade robe was inspired by the orientalism craze of the 1920s. During the 1910s and 1920s, fashion derived much inspiration from Egypt and Asia. Asian motifs were particularly common in loungewear, as robes and pyjama sets lent themselves well to the “oriental,” styles. The robe was a hard drape, and initial exploration included the use of an extremely starched muslin to achieve the crisp origami effect desired. The drape was then translated into the brocade selected for the project. The pant and top were also inspired by Egyptomania-inspired loungewear of the time.

Katie Elizabeth Francisco, sponsor: Sandra Starkey, University of Nebraska-Lincoln, USA
Celtic Nightshade blends various inspirations including Irish fairy folklore, magical herbalism, and spirituality into elegant eveningwear. 3D printing technology was used to create the garment’s embellishments that were combined with hand embroidery. The main objective of this garment was to investigate the use of 3D printing for embellishments. This usage of 3D printing technology provides knowledge related to the integration of custom 3D printed embellishments created via an additive process that produces minimal waste. Fairies of traditional folklore in Ireland are known as the Sidhe. These spirits are not the whimsical creatures associated with children’s movies. Ancient stories of the Sidhe were used as cautionary tales which kept people from straying too far from villages or homes. While some fairies were known to bestow good luck, most were interested in enslaving or mating with humans. This dress was beaded with 100 embellishments and 82% of them were 3D printed.
Lady of the Lake is an artistic appreciation for the beauty of Lake Michigan and Hamlin lake, which is located near Ludington, Michigan. The design process began when artist Dick Bourgault of Ludington, Michigan, took photos around Hamlin lake while taking an early spring walk with his wife. These pictures were posted on social media and the author of this endeavor found them fascinating. After obtaining permission from the artist, the photos were used to create a two-piece womenswear ensemble. Hamlin lake is a man-made lake that was once used for holding logs during for a sawmill built by Charles Mears. Charles named the artificial lake after Hannibal Hamlin who was Abraham Lincoln's vice president choice. The silhouette was inspired by a classic Balenciaga dramatic A-line shape that emphasizes volume. The upper front and back bodice pieces were then digitized and uploaded to Lectra’s Modaris software.
The purpose of this work was to explore bacterial cellulose as a novel sustainable leather-like material for handbag design. This exploration was carried out in two parts. In the first part, bacterial cellulose material was developed through fermentation process of Kombucha tea, using such common household ingredients such as tea, sugar and vinegar, and bacterial cultures. In the second part, a saddle bag style handbag was constructed using the cellulose mats. Regular construction and sewing techniques as well as laser cutting technology were successfully utilized to create an intricate handbag design using bacterial cellulose.
Balanced Beauty resulted from a study of Roman and Greek mythologies and the designer’s attempt to depict balance and structure within an individual’s life. Life is often filled with ventures that can lead to a sense of unbalance. This neck piece with matching wrist cuffs personifies concepts of restraint motivated by a need to maintain order.

Balanced Beauty

Alexis Renee Jones, Central Michigan University, USA
Inspired by the concept of sustainability and based on our previous shoe design made of a green tea-based biodegradable cellulose fiber mat as a leather alternative material, we further challenged ourselves to implement cradle-to-cradle design approach into the shoe design process. We especially focused on sustainable material selection for different layers of the shoe structure and simple shoe pattern development using a zero waste approach. Our bio-shoes also considered much attention to wearers’ functional and aesthetic desires. We chose a contemporary look for the bio-shoes, which can complement current college male students’ desires and needs in their urban campus life.
In designing Fusion of Culture and Technology, a cross-cultural communication perspective was applied to integrate an element from Persian culture within the Western silhouette. The research objective of creating this design was to incorporate three different technologies (laser cutting and engraving, digital printing and pattern digitizing) to create a garment using the cross-cultural communication concept. The patterns of Persian tiles were the source of inspiration of this garment. The garment was draped first and then directly digitized into Optitex and then exported to Illustrator. Then the tile pattern was placed on the digitized front pattern piece to laser etch and laser cut on denim fabric. The same tile pattern was digital printed for the lining of the skirt with unbalanced hem. The technology-based integration of Persian tile element within a western silhouette leaded to an innovative garment that provided insights regarding the implication of cross-cultural communication in fashion design.
This childrenswear ensemble was inspired by the movie, Ondine, which prompted research into the selkie myth, prevalent in both Irish and Scottish cultures. Market research revealed a gap for childrenswear garments inspired by the selkie legend. This ensemble was also inspired by the color schemes of the land and seascapes of Ireland and Scotland, mainly the color green, and also integrated semiotics prevalent in Ireland. The outfit consists of a dress and reversible shrug. These garments were developed using an experimental patternmaking method, the planar flux technique, in conjunction with unique shaping to implement the selkie-inspired-fin-shapes. The ensemble was designed as a self-help outfit for childrenswear, which permits a child to dress her/himself. The ensemble fills a gap in the childrenswear market and also contributes to the knowledge in the field through the patterning development, exploration of digital prints, and heirloom construction methods implemented together in the garments.

April Elisha Stanley, Sponsor: Dr. Ellen McKinney, Iowa State University, USA
The Celtic selkie legend was the inspiration for this bifurcated, childrenswear ensemble. Market research demonstrated a gap regarding selkie-inspired childrenswear apparel. Scottish culture was the second major inspiration for this childrenswear outfit, utilizing the color scheme of the national flag and landscape. Creative components for the original digital textile prints were derived from Scotland. An experimental patternmaking method, subtraction cutting, was used to develop original selkie-shaped designs. The ensemble was to be designed as a “self-help” ensemble, permitting children to don and doff garments without adult assistance. The designer combined multiple creative methods including experimental patternmaking, innovative digital textile prints, needlework processes, and the concept of “self-help” garments in conjunction with the selkie myth and Scottish culture to produce a bifurcated, multi-sized childrenswear outfit. This outfit contributes to field of apparel and textiles and the childrenswear market through advancing the comprehension of experimental patternmaking for children's garments.

April Stanley, sponsor: Dr. Ellen McKinney, Iowa State University, USA
Fashion is like the high-speed rotation of a tire. Fashion trends change frequently; consumers purchase various fashion products according to their consumption behaviors and psychologies. Simultaneously, the fashion industry produces many fashion products rapidly to fulfill customers’ needs and, in turn, fuel financial profits. As a result, a large number of disposed of clothing and textiles end up in landfills, contributing to the deterioration of our environment. I am guided by the sustainable design theories: Cradle-to-cradle, and Emphatic Design, and Transformational Design to develop a Transformational sustainable fashion collection. I addressed the problem of overconsumption by creating garments that can provide more styling options for consumers. The study encourages to build a long-lasting relationship with customers to encourage consumers to reduce the frequency of purchase.

Bingyue Wei, sponsor: Mary Ruppert-Stroescu, Oklahoma State University, USA
Incessant Fragility was part of a five-piece collection in which all the garments were monochromatic and experimental. Through use of extreme pattern-making and draping, as well as hand surface embroidery, depth and texture made up for the absence of color. This collection was influenced by artist, Safaa Erruas, whose work tends to also be monochromatic in an effort to make up for the lack of color, an otherwise common visual catalyst, with another presence that is as equally compelling through patterns and textures. This ensemble has a variety of design details that simulate both constriction and expansion both figuratively in embroidery as well as physically in how the garments are worn. The two pieces to the outfit juxtapose each other through the choice of fabric and further through fabric manipulation and surface embellishment.
Eliza in Plumes of Rose is a single garment from a collection inspired by Hans Christian Andersen’s, The Wild Swans. The piece pays tribute to the classic fairytale while highlighting the main character, Eliza. She is strong and beautiful, remaining loyal and true while saving her eleven brothers from a curse that turns them into swans upon sunrise each day. This dress, a statement piece adorned with rose gold feathers throughout, reflects Eliza’s bold yet delicate spirit while highlighting her journey to save her brothers. The piece is functional while employing detailed couture techniques, adding new innovations to a classic and timeless silhouette.
Using flat pattern drafting, draping, theater costume experience, and a fascination with vintage styles and tailored silhouettes, a fitted wool crepe dress was created with bodice panels, sleeves and a collar. The goals were to utilize a drafted sloper to create an interesting relationship among the lines of the neckline, waist, and hem, with a balance of angles and curves. Using flat pattern drafting from a size 8 sloper for most of the dress, the collar was draped several times, with different fabric weights and various combinations of interfacing, before the desired shape was achieved. The structured look gives a sense of power while still upholding a soft femininity. A strong collar that meets in the back with sharp points contrasts with a bubbled skirt. Strength and elegance are also found in the angled tucks radiating from the collar, as well as the sloping and pointed dropped-waist seam.

Jennifer Lynne

Audrey Borgert, sponsor: Della Reams, Miami University, USA
Powerful Dancer, Graceful Warrior brings strength, dignity, and grace to its wearer. This look, based on images of superheroes and dancers, accentuates the hips, shoulders, and waist and uses bold colors and an extreme silhouette to make a statement and produce a response. The fitted bodice made from red satin, the bare midriff, and the dark braid reference the costume of a super hero, while the extravagant red tulle sleeves and skirt are light and insubstantial, and have elements from the ballet. Although developed for the runway, it is constructed from satin, tulle, and embroidered velvet ribbon hand embellished with beads.
Architectural and Aesthetic Concrete from Recycled Plastic Bottles

This design provides an example of a unique architectural piece composed of an elegant and simple design inspired by modernism and using recycled textile products for sustainability. The design is a transformable garment showing minimalism and consists of a light grey coat, a vest, and a hood that can transform into a cape. A coat serves as a foundation that pulls the other design elements together. A detachable vest as the protective layer, resembles gates and columns in architectural structures and a detachable hood represents a roof that can provide coverage to the wearer. The design was created using 100% polyester felt made from recycled post-consumer plastic bottles. The use of felt as the main material can be associated with the use of cement in architecture for its simplicity and moldability. This design may contribute to enhancing continued alternative thinking in apparel design and increase the use of recycled materials.
The purpose of this piece was to create an engineered textile design that utilized multiple design tools to complete the digital textile print process and investigate experimental patternmaking techniques. Pietersite, a rare rock aggregate, inspired Third Eye through its contrasting hues and organic shapes. The process began by draping the basic dress foundation and then digitizing these patterns into Optitex PDS 15 software. Within Optitex, pattern pieces were trued and exported into Adobe Illustrator CS6. Also, an image of pietersite was manipulated in Adobe Photoshop and then engineered onto corresponding pattern pieces in Illustrator using the clipping mask. The completed pieces were printed on cotton canvas with a Mimaki TX2-1600 textile printer and reactive inks. Following printing and steaming, the pieces were sewn together and the skirt manipulated on the dress form to create three-dimensional folds and an experimental silhouette. Third Eye integrates the steps and technology needed to create an engineered textile design.

Emily Clark, sponsor: Fatma Baytar, Iowa State University, USA
This design was made with the purpose of creating a ringmistress costume for the university circus. The design was inspired by the Victorian era and is a reflection of the old American traveling circus. This design project was also intended to be worn by multiple women of different shapes and sizes so construction details were carefully executed with this purpose in mind. This costume was worn as part of the circus spring shows in 2017.

May All Your Days Be Circus Days: Ring-mistressing in Modern Times with an Ode to the Past

Kimberly Connor, sponsor: Jessica Ridgway, Florida State University, USA
The Bleeding Heart Jacket is a black wool jacket with an attached cape created to explore intellectual ideas and utilize unconventional construction and adornment techniques. The design focuses mainly on ideas of retro futurism and technological innovation while touching on artistic ideas of horror, gender neutrality, and the beauty of the morbid. The garment was lit with LED lights in collaboration with electrical engineering students. The creation of the garment used draping, needle felting, 3-D fabric manipulation, dyeing, and French flower-making techniques.

Martha Grace Costello, sponsor: Stephanie Kay Hubert, University of Arkansas, USA
The American bridal industry has gripped trends that were ground-breaking for painfully too long. Apart from a few noticeable individuals, many designers maintain the same silhouettes that have been seen for decades while only creating new details for these garments. Many people, due to this, have now confused long-standing trends with valuable traditions. This is seen through most Americans’ necessity in finding a dress that is either white or shades of white, with the concept in mind that this a tradition, but wearing a white bridal gown was a trend that Queen Victoria began in 1840. Apart from this, there is also this misconstrued idea that every woman must wear a dress for her wedding, despite the fact that pants may simply look better on an individual. The designer proposed the question: why is there this limited perception on what an American woman can and cannot wear at her wedding if other fashion markets continue to evolve and the history behind the truly traditional garments is buried?
My inspiration comes from the famous painting by Franz Kline’s, Painting No. 7 from the Abstract Expressionist Movement. Kline was an abstract expressionist who created large scale, gestural black and white paintings. I decided to do a female interpretation that contrasts Kline’s thickly applied, aggressive paint strokes. I am being ironic or humorous in a way that connects the act of sewing and femininity with the masculine abstract expressionist movement. By hand painting the fabric I wanted to create a thought provoking, conceptual experience for the viewer and wearer. I wanted this garment to be a unique, wearable painting. I created a more intimate expressionism, as a reaction to the work done by Franz Kline. This garment can be worn and appreciated as a fashion piece, or exist independently on its own, much like a painting in a gallery.
This sustainable design was created using recycled grocery bags. The course requirements of this project consisted of creating a dress using paper or other non-conventional materials and creative manipulation. The grocery bags were made into yarn and knitted together to create a piece of fabric, which was draped into a dress and secured by tying pieces of plastic bag yarn.

Carissa Gooding, sponsor: Patricia Carlos, Columbus College of Art and Design, USA
La Courtepointe was inspired by dress worn by assistants of the upper class who were given hand-me-down clothing in which they would take, rework, and make something new. La Courtepointe was designed using unwanted materials where items were disassembled and then reworked/upcycled to create something new, following the process embodied by the sustainable company, Traidremade. Old blankets and quilts were acquired along with unwanted men’s chambray shirts and denim. La Courtepointe was created for the sustainable-minded female consumer age 18-30 for spring/summer 2018, and may be best suited as part of Everlane as a potential new branch for their online retail stores. Currently, Everlane focuses on transparency and ethical sourcing, but La Courtepointe could add to their product offerings by including repurposed/upcycled garments that further support sustainable movements in the apparel industry. La Courtepointe was all about taking something old and forgotten, and creating something new and beautiful.
A Study in Blue Ensemble is an exploration into the capabilities of inkjet digital textile printing on different substrates using fiber-reactive dye-based inks. The ensemble was inspired by the Bauhaus and its effects on art movements which emerged later in history such as Abstract Expressionism. Additional design inspiration came from the Art Deco fashion era and the illustrations of Erte. The cotton dress was integrally knitted on a Shima Seiki Mach 2-123X 8-Gauge knitting machine with knit and tuck structures that allowed a blocked effect which was juxtaposed with a printed watercolor gradient design using a Shima Seiki SIP-160F3L flatbed printer. The kaftan design was created from an original watercolor painting and digitally printed onto five momme silk habotai using a Link DTP UJet printer. Adobe Photoshop was used to manipulate the artwork and prepare it for printing with a resolution of 180 and RGB format.
Through the Shell is a look from a ten-piece collection called Spine which explored the idea of realizing the base of yourself who you are, what your values are, what grounds you and reconciling with it. It takes inspiration from skins such as reptilian scales and inner body structures such as bones and muscles. By juxtaposing these two, it synchronizes the core and exterior to create harmony, showing that what is seen on the exterior is a reflection of the interior. This features a partially obscuring shell cape, revealing just enough of the garment underneath to get hints of color mimicking the surface design on the rough, reptilian plains of the shell. The textural interest was created with spray foam insulation to mimic the ridges and bumps of reptilian skin, and the colors on both the inner and outer garments are hand-applied with reactive dyes and paints, respectively.
Ring Leader is a piece created to show the strength and authority of a woman in charge. Inspired by the ring leader of a circus, this design enhances the prominence and impact of a powerful woman. The large scale geometric pattern of the silk taffeta coat was carefully placed in relation to the gold piped seams to alternate areas of black with iridescent green. The oversized cartridge pleated ruff helps to create a powerful contrast and adds to the drama of this design, evoking a strong reaction from the viewer.

Stephanie Leginestra, sponsor: Susan Ashdown, Cornell University, USA
The Fashion House Jacket challenges the concept and purpose of the traditional gentleman's smoking jacket and transforms the antiquated garment into an evolved look for the modern woman. Designed for a minimalist, hardworking woman, the ensemble consists of garments with the ability to transform from comfortable loungewear to professional clothing suitable for Seventh Avenue. The three-piece outfit features a floor-length crushed velvet jacket, crepe-back satin wide-legged pants, and a sueded charmeuse tank top. The ensemble challenges traditional dress codes for the workplace, proving that clothing can be comfortable and still appear professional. At the same time, by taking a garment traditionally worn by men and redesigning it for women, the clothing illustrates female empowerment in a man’s world. The Fashion House Jacket transforms the essence of the smoking jacket, its dignified presence and luxurious feel, into an outfit that radiates with female empowerment and a glow of relaxation.

Grace Lian Lawson, sponsor: Jooyoung Shin, Cornell University, USA
The Carbon Edition is a design that introduces colors and a unique aspect of business wear. This ensemble is one of four complementary designs that push the boundary of business wear. The mandarin collar emphasizes the prominent lines that are carried throughout the ensemble and fashion line. The yellow-orange accent unifies the charcoal and beige colors to be more cohesive. In conclusion, The Carbon Edition is a unique ensemble that is guaranteed to turn heads at the workforce. This ensemble meets the needs of the young urban professional who wants to be taken seriously around the older business crowd, but still wants for follow the fashion trends of the year. Lastly, the cohesion of colors and design elements of lines and the minimal aspect show an innovative ensemble that is ready to be sold on the market.
This ensemble was created to bring together the disciplines of fashion design and interior design. We live in a world surrounded by fashion as much as we live in spaces and they are both reflections of ourselves. Fashion and interior design are much more than decorations, they can be an outlet for one’s creativity and positively support their mental well-being. This concept came to me when I was working on an interior design project and a fashion design project at the same time. The design and technique is inspired by the New York City interior design firm, Clodagh and fashion designers Viktor and Rolf. The ensemble includes hand weaving in leather and faux leather for the skirt and choker.

Intertwine

Raegan McGuire, sponsor: Rachel Anderson, Texas Tech University, USA
The d\EVOLUTION gown combines organic elements that can be found in a truly magnificent creature, the Cassowary. Being one of the closest relative to dinosaurs, the Cassowary exemplifies qualities that both resemble modern birds and reptiles. The dress creates the illusion that skin becomes scales, which then turn into feathers. The ebb of the depths in printing elements and feathers brings to the forefront drama and exuberance akin to the Cassowary’s true nature. We used 3D printing to mimic select elements from the animal. The spikes at the shoulder of the garment are representative of the keratinous quills located at the wings of the cassowary. The feathers depict those of the bird and its long, thin feathers. The lofted texture along the body was printed directly onto the fabric to emulate the varying skin patterns.

Julien Remi Nguyen, Gerald Hopper, Kaley McClure, Jon Rankin, sponsor: Margarita Benitez, Kent State, USA
Astro is part of a larger stargazing inspired collection titled, Galaxy, which combines two very different categories of apparel: tailored garments and streetwear. To show how streetwear does not always need to be casual in form, Astro embodies the vision of a deluxe street-style that joins the casualness found in streetwear fashions with high design aspects of tailored professional wear. The purpose of this combination was to accept the challenge of perplexing patternmaking while creating a well-fit, tailored streetwear ensemble, targeted to the creative urbanite consumer.

Moschino’s 2017 resort wear collection inspired the use of colorful prints in bold blazers and trouser designs. The way stars glistened on a dark canvas provided the visual effect of utilizing studs on certain areas of the garment. The gold foiled and toned interconnected print on the textile mapped out how the stars are all united together in the galaxy.
After analyzing the dress silhouettes of the past, the purpose of this gown was to create a modern garment using the design details of the 1930s. Designs by Elizabeth Hawes and Elsa Schiaparelli were the main inspirations. Initially conceived as a solid dress, this design came to life after sourcing the fabric. It features a sound wave like border print in bright, bold colors on a black ground. The dress features an inverted pleat, leather piecing at the shoulders, a sheer back panel and a fabric belt with jeweled buckle. The dress was first draped, with flat patterning used to correct issues with the skirt seaming. Adobe Illustrator was used to visualize print placement options among the skirt and bodice pieces before the fabric was meticulously cut. This dress appeals to a wide target market. It’s an edgy, unique take on a black dress while remaining comfortable in its modesty.

Jamie O’Gallagher, sponsor: Susanne Maroske, Mount Mary University, USA
The inspiration for this apparel design stems from the deeply held fears of inadequacy many people fight. The goals of creating this design were to:
a) help the viewer to fight back against negativity in their life and b) combine digital printing and laser cutting techniques to create a one-of-a-kind garment. The smaller colorful scribbles print was created in Adobe Illustrator using the pencil and pattern tools, and digital printed on the cotton sateen. The black scribbles were laser cut to represent a pivotal moment of a battle between a person and their psyche. The black scribble is the internal voice of inadequacy while the smaller more colorful scribbles printed on the fabric represent the positive thoughts which can fight back at the inadequacy if they band together.
The inspiration for this apparel design stems from the designer’s deeply rooted religious beliefs which help others recognize the eternal significance of their actions. The goals of creating this design were to make people stop and consider their future, and combine digital printing and origami techniques to create a one-of-a-kind garment. The designer incorporated the Fibonacci sequence into both the engineered print and the style lines. The print concept started with an image of a sunflower, and an artistic depiction of the Fibonacci sequence with other golden spirals spinning off of it. The inspiration of the style lines came from the origami. The spiral was cut to the center, 29 tangent lines were plotted, sliced, and spread to create 2” dart intakes. The jacket was created by utilizing laser cutting technology. The overlapping shape creates a latticework of connected pieces, symbolizing the connected nature of events throughout history.

Eternal Nature

Augusta Overy, sponsor: Ling Zhang, Central Michigan University, USA
This project is primarily concerned with the possibility of redirecting cultural appropriation into appreciation in a way that is respectful to that culture, but with an innovative approach, so as to promote unity in a society that is so ethnically diverse. How can we protect the traditional parts of a culture in a way that can be appreciated by the mass society? The aim in this project was the proper unification of two worlds; this will be accomplished by utilizing aspects of fashion technology and incorporating traditional elements from West African cultures; specifically the Massai tribe of Kenya and Tanzania, Adire prints from Nigeria and color inspiration from the Kente cloth of Ghana.

PAWADA

Paula Oyedele-Caleb, sponsor: Ja Young Hwang, Kent State University, USA
The purpose of this piece is to give movement with a structural approach. The concept came from viewing individuals that are very poised with their overall appearance but love to have mobility in their everyday lives. To achieve this, I drew inspiration from Japanese and Korean traditional wear. The design is to give off a structured appearance with a geometric look coming from inspiration of the Asian historic feel all in the mix of a modern design. The color scheme is black and white, which are minimal, with a twist of light blue. The idea of using black, white and blue is to let the individual wearing it feel neutral and always presentable. The fabrics used to accomplish this were silk satin, white faille, black faille and a blue silk organza. The white faille and black faille are meant to give contrast and a sleeker look but the blue silk organza helps balance the design to keep it visibly clean with structure.
What Lies Beneath the Beauty tells the story, through surface design, of young women in society who suffer from anxiety and depression. This dress is meant to spark conversation and bring awareness to mental illness that plagues women today.

Alice Palay, sponsor: Jessica Ridgeway, Florida State University, USA
Rarie was created in celebration of the life of my paternal grandmother. Part of a collection that utilized natural fibers and natural dyes in combination with surface design techniques, this piece explores a new age of craftsmanship in the fashion industry and strongly encourages the idea of dress up for women of all ages. The simple silhouette allows for greater diversity in fit among women. The dress was made of hand-dyed fabric. The silk velvet was scoured, mordanted, and dyed in a vat of madder root. The appliques were crafted from varying fabric scraps, beads and sequins; my grandmother’s portrait was used in reference. Fabric scraps were cut, applied and beaded upon. The appliques were added to the constructed garment. Rarie was about hand crafting a work of art that is meaningful and inspiring - celebrating your heroes through wearable art.
The Beginnings of a Dress was inspired by an art piece created by Anselm Kiefer. This artist grew up in post-war Germany and used the scenes of desolation and archaic fairytale stories as the backdrops to his art. He picked up anything—dried flowers, rocks, dirt, hay, paint—everything within his grasp to softly astound the world with little villages of sculptures, paintings, and even little shacks. In the spirit of such an artist, I created this piece. I used some old white curtains and scrap organza, ice dyed them, then laser cut flowers out of some of the fabric and used the rest to drape and smock the bottom of the dress. The whole dress is hand sewn, each flower thoughtfully placed, each gather in the skirt stitched with hands stained in dye. A few weeks and a hand brace later, you have the dress you see before you.

Lauren Reggi, sponsor: Andre Julian West, North Carolina State University, USA
Street Serenade II is a limited-production garment for the women's street-wear market. The ensemble consists of a high-low distressed denim duster and high-waist straight leg pants featuring a flared-out waistband created using flat pattern techniques. The front of the duster consists of a textual knit cropped bodice with embossed roses and a cut-out on the left side while the back of the duster features an original painting depicting the growth of one's journey, blossoming out of their circumstances and surpassing what is expected of them as told in the poem The Rose That Grew from Concrete by the late Hip-Hop artist, Tupac Shakur. The purpose of the garment was to illustrate the destruction of the streets and urban living (distressed denim) and how one can grow through what they go through, and blossom from life’s struggles while finding the beauty within them (the painting).
Sands of Time

This garment was designed based on a story created after being inspired by complex time travel in literature and films, scientific theories about the space time continuum and black holes, and the cyclical time view of ancient Mayan people. The story of this dress is about two people that keep meeting in the wrong order. The seams of this 7-paneled dress do not line up causing the print, created in Adobe Photoshop and digitally printed onto cotton twill fabric, to not line up which represents these two people. These lines billow down the length of the dress to mimic the flow of sand falling in an hourglass and alluding to the idea that time doesn't always act in the way that one's perspective tells them it should act.
This design was inspired by concepts of duality in different cultures and religions such as within Aztec religion, Egyptian culture, Pima Indian culture, and even ideas within the Illuminati. Much of these worldviews use animals and colors to personify complementary opposites and balance. The bold yet intricate style of this project was inspired by brightly painted ancient Aztec sculptures of basalt while the color story came from a modern Aztec painting by Rufino Tamayo entitled Duality that features a turquoise snake against a red sky fighting an orange jaguar against a blue sky. The prints, created in Adobe Photoshop, were engineered onto the garment patterns in Illustrator after digitizing the paper pattern with Lectra Modaris. After which, the engineered pieces were digitally printed onto cotton canvas. The prints were placed on the same place on either side of the garment but in contrast colors to represent opposites in balance.
Apparel design has been consistently developing throughout history. As technology has advanced, the advancement for clothing and textile development has become more efficient for companies to design, manufacture, and sell garments. Within the last decade, 3D virtual apparel design software has been adopted by companies to save money, time, and resources. The design, Underwater Fantasy, was created, designed, and implemented using 3D virtual design software V-Stitcher by Browzwear, a Gerber Technology.

Lindsay Sharpe, sponsor: Seoha Min, University of North Carolina - Greensboro, USA
The purpose of this design was to investigate the possibilities of sustainable fashion. To make a statement against industry waste, ways to reuse secondhand material and reduce the amount of waste produced from the patternmaking and construction process of garments were explored. The material used in the body of this dress is 100% cotton denim taken from jeans purchased at a secondhand store. By buying secondhand clothing, no water or chemical waste resulted from the production of this design’s fabric. The harmful effects of fast fashion, toxic dye and chemical treatments, and other common apparel production techniques have on the environment should be considered carefully by designers. To combat these harsh impacts, alternative techniques to fashion design were explored during this project. This specific design will stand as a reminder, encouraging the designer to contemplate zero waste techniques at all levels of apparel production.

Soyoung Jenna Song, sponsor: Kaylin Hagerman, Central Michigan University, USA
This metal mesh dress reflects upon the systematic murder of over 6 million Jews during the Holocaust by subtly reappropriating the yellow star that Nazis forced Jews to wear. At the time, the star could not be safety pinned to one’s clothing, this means that if the person was in danger, they could easily remove the star and hide their identity. For this reason, the safety pin is reappropriated as the sole connecting feature throughout garment. The metal itself is dipped in 4 successive acid treatments. While this acid does tarnish the surface of the metal, it does not compromise the integrity of the garment, much like Judaism throughout WWII. This design is meant to reflect upon the Jewish experience but also translate it into modern forms of oppression and the way that the star translates to marginalized groups in any time.

Samantha Leah Stern, sponsor: Denise Green, Cornell University, USA
The purpose of this design was to create a jacket and skirt as a critique on the absence of unapologetic and powerful design in contemporary fashion. The source of inspiration for this design was Gregory Prestegord’s Building in the Rain painting: the look of rain falling down the side of a skyscraper. Beading techniques were used to convey this vision by attaching lines of seed beads to the sleeves of the jacket in a waterfall pattern. The design and construction process for this look includes creating foundation patterns, using pattern techniques from Shingo Sato’s Transformational Reconstruction to achieve my design and incorporating advanced sewing techniques to construct it. This look combines traditional tailoring and couture sewing techniques with innovative pattern design with a powerful style.

Damien Tobi, sponsor: Rebecca Robinson, Columbus College of Art and Design, USA
This design is inspired by the work of Lee Mullican. For this A-line denim dress, I designed a print that represents an abstract topography of the human torso and another one that was inspired by Lee Mullican’s radial artworks. The name of my piece is Oscillation and its purpose is to create a disjointed reaction within the observer. As soon as you lay your eyes on the piece, your brain has a hard time finding a single focal point to look at. The movement created from the garment’s directional lines guide your eyes in all directions in its design but never allows them to rest for too long. The fragmented feeling created from the mismatched front and back contributes to the disjointed theme by making the viewer wish that the front and the back connected. The surface design was achieved using hand painting and machine embroidery.

Oscillation

Laura Vetil & Andre West, sponsor: Anne Porterfield, North Carolina State University, USA
This look, Kaleidoscope, targets women age 20-50, as the designers believe active wear is meant to fit a wide range of shapes and sizes, no matter of age. It is a unique look in various ways. First of all, it keeps wearers be active and comfortable while also satisfies their aesthetic needs. Seconds, the designers used a variety of technologies and different techniques in this look, from 2D and 3D OptiTex, laser cutting, reflective tape, to innovative materials. The use of technology was not only sustainable but also very time efficient. Designers were able to experiment with design details, correct fit issues, and produce the garments in a timely manner. In addition, the designers experimented with laser cutting and reflective tape to make the design be not only comfortable and functional, but also be with a splash of style and fun.
This garment was inspired by the barker for the fun house who entices you to enter the halls of distorting mirrors, rooms with crooked walls, and other optical illusions and disorienting spaces. Just as the fun house distorts the proportions of rooms and hallways, this outfit distorts the body. The proportions of the outfit create the illusion of immensely long legs, wide shoulders, and a short torso. The bust is minimized and the hips are extended. The outfit transforms the model to an image in a fun house mirror. The bodice is a black silk and wool blend with a pattern of raised green dots. Black pleather piping in the seams relates to the color and texture of pleather skirt’s checkerboard print. Overall, this design is edgy and disturbing, but with an essence of fun. It challenges the eye with its proportions, yet achieves a cohesiveness in its very quirkiness.

Katherine Williams, sponsor: Susan Ashdown, Cornell University, USA