TELEKOM FASHION FUSION | FINALISTS 2016

DIGITALLY ENHANCED FASHION CATEGORY

PYRATES

Team: Regina Polanco, Omar Benomar, Zuzana Kralova, Marie Lietaro
Team members: 4
Country/city: Switzerland, Geneva
Category: Digitally Enhanced Fashion
Link: pyrates.ch

Project: The Swiss start-up Pyrates – represented by Regina Polanco, Omar Benomar, Zuzana Kralova, and Marie Lietaro – produces high end sportswear which is timeless, fashionable and functional. Innovative, intelligent materials – "smart fabrics" – are the hallmark of the collection. Smart fabrics refer to textile fabrics which are not only soft and easy to wear but also offer added value from a health and cosmetic point of view thanks to special natural fibers. For example, Smart Fabric Health made of natural proteins and amino acids provides UV protection and, with infrared radiation, improves blood circulation and boosts the immune system. Smart Fabric Cosmetic line contains seaweeds and Vitamin E with an antioxidant, moisturizing effect which remains even after washing. The aim of the Pyrates founder Regina Polanco is to revolutionize everyday clothing through intelligent fabrics that care and protect your body and skin.

ARTICULATED DRESS

Team: Dagmar Kestner, Prisca Vilsbøl
Team members: 2
Country/city: Germany, Berlin
Category: Digitally Enhanced Fashion
Link: www.dagmarkestner.com; priscavilsbol.com

Project: Dagmar Kestner is a designer and artist creating work at the intersection of fashion, textile and sculpture. Prisca Vilsbøl is working in the field of fashion design, material and design research. For Fashion Fusion, they are developing "Articulated Dress", a garment changing appearance, structure and shape, stimulated by the wearers touch. Its macrostructure can contract, change or open up. The interactive surface of the "Articulated Dress" can be modeled and altered, so that the silhouette temporarily changes. From a technical perspective, the designers want to explore conductive laser cut textiles and sensory shape memory polymers to induce versatility and flexibility. The team's vision is to explore the poetical potential of the SMP technology and to design a smart, communicative couture garment. At the same time, they want to bring the luxurious warmth of hand-made garments into a machine made product.

URBAN BIKE CLUB

Team: Fabian Romanowski, Heike Sigloch
Team members: 2
Country/city: Germany, Berlin
Category: Digitally Enhanced Fashion
Link: urbanbikeclub.com

Project: The aim of Urban Bike Club is to encourage people to cycle. After all, cycling is the future of urban transport. With this in mind, the team is developing safety vests which look good, make wearers more visible and encourage them to cycle more often. Represented by Fabian Romanowski and Heike Sigloch, Urban Bike Club is working on three product versions in the Fashion Fusion Lab: 1) A fashionable vest made of neon and reflective materials. 2) A vest which also features a decorative pattern made of LEDs which ensures maximum safety for cyclists even in the dark. 3) A vest which is also linked to the Urban Bike Club app via an iBeacon Bluetooth connection. The application measures how often a person cycles and connects them to other users. Thanks to the social function, a user can see how they compare with other cyclists.

MUSICSUIT

Team: Greta Melnik, Lukas Hartmann
Team members: 2
Country/city: Germany, Berlin
Category: Digitally Enhanced Fashion
Link: www.notjustalabel.com/designer/greta-melnik, www.mntmn.com/#people

Project: The MusicSuit opens up new possibilities when performing music. Artists, musicians and dancers can use their entire body as a musical instrument and thus make their performance even more powerful and complete. The invention developed by fashion designer Greta Melnik and software engineer Lukas Hartmann allows users of the suit to control the sound of the music by body movements alone. The wearer of the MusicSuit can vary sound parameters and control individual elements of a music track. From a technical perspective, the entire garment is equipped with wireless sensors which are connected to an interactive, variable-tempo music platform.

LIVESCAPE BLOOM

Team: Caroline McMillan
Team members: 1
Country/city: Germany, Berlin
Category: Digitally Enhanced Fashion
Link: n.a.

Project: LiveScape Bloom is fashion connected via the Internet of Things which is designed to be worn rather than used. Caroline McMillan does not want to produce a throwaway product – she is looking to develop a sustainable yet fashionable wearable. The basic idea: technology can have a natural, organic autonomy just like the human body. The fashion designer achieves this by replicating the beauty of nature in the form of moving flowers. Electronics, textiles an anthropomorphic movements combine to produce floral decorations. Sensors bring the petals to life. The movements can be individually controlled via mobile end devices. For example, the flowers can be synchronized to the wearer's heartbeat or their favorite song.

ST VITO EXPERIENCE

Team: James Hudson, Alma Edelstein-Feinsilber
Team members: 2
Country/city: Germany, Berlin
Category: Digitally Enhanced Fashion
Link: www.stvito.com

Project: ST VITO is a multimedia project that combines music, movement and visuals and aims to break down the barriers between the audience and the artist. The vision of James Hudson and Alma Edelstein-Feinsilber is to bring people together through technology and to develop a new type of communication – through touch, visual effects and movement. For dancers and artists, the team has developed smart fashion costumes with a touch-sensitive surface. These costumes are glowing screens, musical instruments and light show elements in one. They consist of a technical layer equipped with skin and environmental sensors and a translucent "fashion layer" above it which can be changed as desired. Connected with each other, online or with the venue's multimedia systems, the appearance of the costumes is fully variable. Depending on how they are touched or moved, or influenced by the music beat or the projected visual, they change their appearance like a chameleon.

CONNECTED DEVICES & ACCESSORIES CATEGORY

WOTCH

Team: Mauricio Piper, Matthias Lambertz
Team members: 2
Country/city: Germany, Cologne
Category: Connected Devices & Accessories
Link: www.wotch.de

Project: For hundreds of years watches have been more than only a decorative piece of jewelry with a certain emotional value. Up until now, anyone who decided on a smartwatch would no longer have any use for their traditional watch. Mauricio Piper and Matthias Lambertz would like to change this. They make conventional watches intelligent by adding a smart strap. The Wotch eStrap is a leather strap which combines the functions of a smartwatch with those of a fitness tracker and has a display on the rear of the wearer's wrist. The technology is hidden inside the strap and is invisible at first glance. With its simple, timeless design, the Wotch eStrap can be combined with an extremely wide range of watch designs.

TRAINWEAR

Team: Gernot Bahle, Bo Zhou, Lorenzo Fürg
Team members: 3
Country/city: Germany, Passau & Kaiserslautern
Category: Connected Devices & Accessories
Link: www.trainwear.de

Project: While the number of steps on a stepper and the number of kilometers traveled on a bike give an indication of a person's sporting ability, there are fitness exercises which to date could only be assessed by professional trainers. Unfortunately, such trainers are not always available. With a modular software system, Gernot Bahle, Bo Zhou and Lorenzo Fürg are looking to solve this problem in cooperation with the German Research Center for Artificial Intelligence. The idea: specially developed sensors (prototypes originally developed by the EU FET project SimpleSkin) are used on different parts of a person's body while they perform various sports exercises. These sensors detect the pressure on textile surfaces and can easily be integrated into a person's clothing. During training, the user can bring up the information collected – regarding breathing, muscle contraction, balance and pulse etc. as well as how well they perform the exercise – on a pair of intelligent glasses or other end devices. The aim is to provide sport fans with detailed feedback regarding their performance – helping them to achieve their goals and correct any mistakes in their posture.

YUMA

Team: Theresia Uhrlau, Julia Schröder
Team members: 2
Country/city: Germany, Hamburg
Category: Connected Devices & Accessories
Link: n.a.

Project: Yuma is aimed at modern backpack tourists. As the Yuma inventors Theresia Uhrlau and Julia Schröder know: a source of power is essential for anyone who travels with little baggage. The aim of Yuma is to enable travelers to generate solar energy themselves in a sustainable manner. Lightweight solar cells in a specially developed solar material can be integrated into various multifunctional outdoor products which are part of a backpack tourist's baggage anyway. This way, the waterproof rucksack protector and the ski goggles could automatically capture the sun's rays during the day and generate the electricity needed to charge end devices such as laptops, smartphones or lights.

POQIT.BERLIN

Team: Marko Berndt, Timo Golomski, Martin Volmerding
Team members: 3
Country/city: Germany, Berlin
Category: Connected Devices & Accessories
Link: poqit.berlin/de

Project: Marko Berndt, Timo Golomski and Martin Volmerding have a vision – a smart wallet which will make day-to-day life easier for smartphone users. The stylish natural-tanned leather wallet known as poqit doubles as a high-performance powerbank. Not only does it save its user having to carry a charging cable – it also connects automatically to the smartphone via bluetooth, maintains the connection permanently and informs the user as soon as the mobile phone is no longer in the vicinity. For example, it helps the user find their phone if they have mislaid it and can even protect it against theft. poqit can be charged wirelessly on a base station specially designed for the product and will inform the user when it runs out of power.

TRANSWARM ENTITIES

Team: Maartje Dijkstra, Beorn Lebenstedt AKA Newk
Team members: 2
Country/city: Netherlands, Rotterdam
Link: www.maartjedijkstra.com

Project: With TranSwarm Entities, fashion designer Maartje Dijkstra together with Beorn Lebenstedt (AKA Newk) are looking to create a sculptural fashion piece, build up from small fragments which can fly like drones. These 3D printed, individual pieces are able to match the tones from the motors to the melodies of electronic music, presented as a spectacular performance. Just as an organism is made up of cells, the individual fragments produce a moving, breathing design. When producing the dress, the designer team uses the very latest technology including manual and digital 3D printing and drones. The result is an innovative fashion performance which opens up new dimensions of haute couture due to the flight functionality, the permanent movement, the sound of the drones and a piece of music specially composed for the dress by music producer Newk. The option of controlling the movement of the fragments via a smartphone also allows the user to add individual touches and makes the dress a very personal eye-catcher.

SMART SERVICES CATEGORY

MIMEME

Team: Tank Thunderbird, Antonio Ciutto, Christian Bruns
Team members: 3
Country/city: Germany, Berlin
Category: Smart Services
Link: www.digital-alchemy.de, www.antoniociutto.com, www.moonberlin.com

Project: Tank Thunderbird, Antonio Ciutto and Christian Bruns are working on a smart services product for connected fashion fans: the augmented reality experience, Mimeme. By giving users a digital aura, an app will enable new fashion experiences through virtual clothing. The team is planning to create wearable pieces with visual markings, which serve as placeholders for elements, forms and models that are projected digitally onto the body. This virtual clothing will allow users to wear fashions that they do not physically own or that do not exist in the real world. The wearer could even slip into a completely different identity. The virtual clothing will be viewable in real time through end devices such as augmented reality glasses or smartphones. The team believes that Mimeme will offer added value for experimental fashion, gamers, and even for parents to find their children more easily in crowds.