

## Fashionable Technology

Parsons The New School For Design &  
Estonian Academy of Arts

Fashionable Technology looks at end users as fashionable beings, attentive to style, aesthetics, branding, and the expressive potential of wearable technologies. It refers to all design objects that are associated with aesthetics, wearability, or some degree of mobility. Thus, it includes experiments with enhanced materials, technologies, or electronic textiles, as well as testing the effects of the interaction with the objects. It deals with the aspect of craft and technology in a novel manner focusing on aspects of a “new generation of wearables”.

The projects presented are executed during the Collaboration Studio called “Fashionable Technology” at Parsons The New School For Design in New York during the Spring 2007 semester, led by Sabine Seymour and Alison Lewis, and the workshop course also entitled “Fashionable Technology” at the Estonian Academy of Arts in Tallinn during the Fall 2006 semester, led by Sabine Seymour. In a contextual analysis, developed in group projects, the aspects of communication, aesthetics and functionality with a specific focus on the idea of dynamic surfaces were revealed and further defined. This required a parallel understanding of embedded system design, networked environments, and interdisciplinary design issues that validated the feasibility of such (wearable) dynamic surfaces.

The diverse background of students in the studio, coming primarily from the department Communication, Design, Technology at Parsons, offered the ability to play with physical computing and design at the same time. The students from the textile department in Tallinn brought a fantastic insight of textile design using Estonia as a backdrop for their projects.

### Institutions

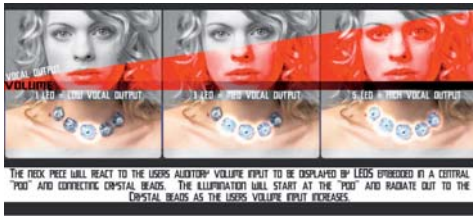
Communication Design + Technology at Parsons The New School For Design is a department and a collective design force of over 700 students and faculty engaged in work ranging from typographic exploration to geek graffiti, book design to game design, information visualization to animation. The programs in Communication Design (CD) and Design and Technology (DT) form a dual curricula that emphasizes experimentation, collaboration and social activism in the design of media experiences and new narratives for all kinds of people, in all kinds of places, around the world.

The Department of Textile Design at the Estonian Academy of Arts focuses on two main areas of specialty know-how - weaving and fabric printing, with specialisation on creating clothing and furniture fabrics. Specialty subjects will introduce the student to designing unique textiles and industrial products, interior decoration principles, printing, dying and weaving techniques, knitting, felting, material studies, history of textile and applied arts, and ethnography.

Joseph Hladek and Jeannie Joshi  
**Aud\_Mod 2.0 choker & Emoti LED cuff**

The *Aud\_Mod 2.0 choker* and the *Emoti LED cuff* are worn on the neck and wrist. These two accessories with embedded technology capture ambient noise levels present in the space near and around the wearer, displaying illumination via an array of surface mount LEDs incorporated seamlessly into the textiles design and texture. The next stage will be the addition of pulse rate monitor sensors to display the wearers' vitals by way of the accessories as an artistic expression as well as a style choice. The target audience is a New Yorker, with a mix of uptown/down-town sensibility.

developed in the Collaboration Studio: Fashionable Technology at Parsons The New School For Design; New York, USA



Hanna Tiidus  
**murumatt ("grass carpet")**

The idea for the carpet came from our Estonian weather during the winter. It is meant to be in a small lounge-restaurant where you can relax and be surrounded by warmth. The texture, design and color are inspired by spring because during the cold and dark winter you can only dream about spring (warmth and sun). This carpet is made of felted wool and is woven on a traditional loom in two layers. In between those layers there is a heating system that will keep your feet warm.



## Campus 2.0

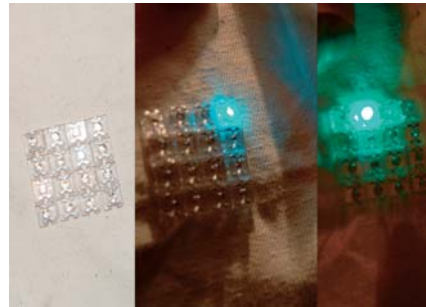
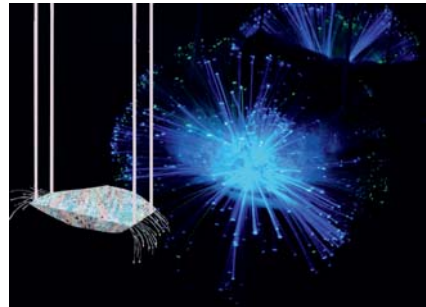
### Marit Mihklepp, Kai Eichen, Hanna Tiidus **springON—Room installation**

The room installation *springON* consists of three individual objects: a carpet, a tablecloth and a pillow. Together they create an atmosphere of spring, forest, nature, relaxation, light and warmth. This installation is inspired by our cold and dark Estonian winters when everybody tends to get tired, frustrated, and sensitive due to our weather.

developed in the workshop course Fashionable Technology at Estonian Academy of Arts; Tallinn, Estonia

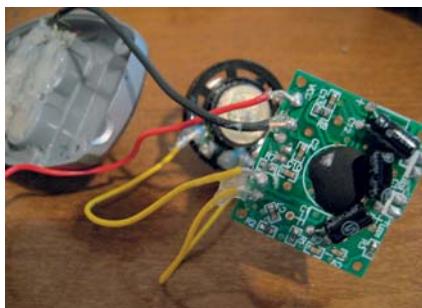
### Marit Mihklepp **pilvepadi (“cloud pillow”)**

I wanted to create a switch into the magic world of Estonian nature even in winter’s freezing darkness. I combined flying (swinging) and northern lights (LEDs). Children know that everything is possible because they can fly without wings by using swings. They have found the eternal spring. Playing with those ideas I came up with a pillow (cloud), which lightens up when you sit on it (switch it on); and at the same time it is a soft floating swing.



### Kai Eichen **lillelina (“flower tablecloth”)**

The idea came mainly from nature and thermochromic ink that I wanted to test. I was thinking of a tablecloth because it is a surface where usually hot items are placed. Using thermochromic ink, I printed a word-puzzle game over a floral pattern done with regular ink. Thus, one can play with patterns appearing and disappearing. The puzzle appears when cups or warm hands are placed on the table. By moving hot items on the table, it is possible to make the flowers disappear; at the same time the puzzle appears, and you can find the hidden words.



Shannon O'Neill  
**Super Secret—Accessories for Girls**

*Super Secrets* is a series of accessories for girls that allow them to secretly communicate and share with their best friends. The accessories conceal the technology, thus reinforcing the theme of secret communication while providing a pleasing aesthetic for girls. The hair bows have a hidden voice record and playback device. This can be used to secretly pass messages to each other and can also be worn when not in use. A set of charm bracelets also act as

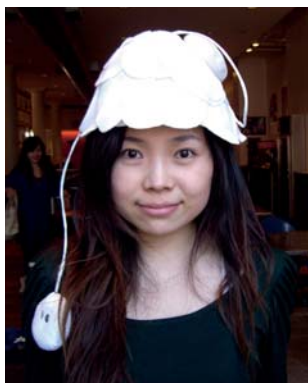
a key for a keepsake box they share. By taking a circuit from a reminder keychain it is rewired so that the play and record buttons have a wider surface area. It is then concealed within the bow so that one side of the bow can be pressed to play and the other side can be pressed to record. Incorporating a small magnet in a charm bracelet makes the bracelets able to open a magnet-activated child-lock placed within the keepsake box.

developed in the Collaboration Studio: Fashionable Technology at Parsons The New School For Design; New York, USA

Jean-Pierre Gary  
**Visibrator**

The walking cane for the blind has existed since trees grew branches. But in today's tech savvy environment there are certainly other systems to aid individuals if they cannot see. This project is an effort to demonstrate the utilitarian benefit technological systems integrated into garments can be used for in human disabled contexts. This prototype does not plan on exceeding the abilities of a cane for the blind. But it aims to demonstrate the potential abilities that technology can replace.

developed in the Collaboration Studio: Fashionable Technology at Parsons The New School For Design; New York, USA



Dunja Pantic  
**talking heads**

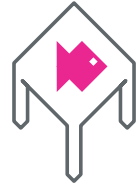
A hat is the most noticeable item of clothing one can wear, it is the first place that attracts attention as it is right above the face.

The hat is for a person that wants to interact with the rest of the world, through personal sound recordings. A person that wants to show off in public giving away pieces of his own mind. It has two audio recording devices embedded in balls which hang from the hat. Each recorder has a different sound (a phrase, or lyric or something somebody else said, that has been recorded by the person wearing the hat) which can be played when one of the balls is pressed. The user would use these while walking down the street or sitting in a park or at a party when trying to socialize, showing off in a friendly

and fun way. The balls will have different sounds coming out of them, based on what the person has recorded—music, messages, sounds. And therefore will make the hat unique to the person wearing it.

# Fischtisch

supported by IDK@UDK Berlin



André Huber, Martin Bramer

*Fischtisch* is an interactive table. The table top is made up of what might be termed individual pixels in the form of glass plates. Under each of these plates is an LED, the sum total of which constitutes a matrix.

This matrix is a communications organ: it enables the *Fischtisch* to see and to keep abreast of developments in its environment via images. For communication to be possible, there has to be a sort of brain that transforms the registered impulses into reactions. This function is assumed by several microcontrollers inside the *Fischtisch*. They are aided by a program whose core element is an adaptation of a relatively new measurement procedure designed to perceive touch. An additional programming challenge was the communication between the controllers and the control module connected to them.



Martin Bramer

The interactive applications that run on the *Fischtisch* should be substantively related to typical table scenarios.

<http://fischtisch.de>

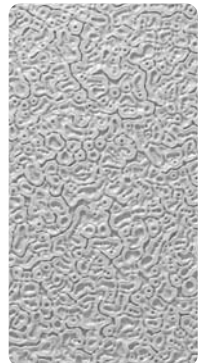
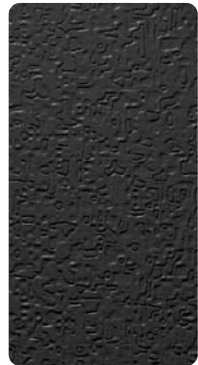
Florian Seeliger, electrical engineering; Patrick Wischnewski, computer science; Christian Langner, computer science; Martin Bramer, design  
The Starting Lineup: Charles Windlin, André Huber, Till Grosch, Sabine Seymour, Martin Bramer

# structurate™

Marcus Liebich & Clement Greiner

The structurate™ method we've developed is an extremely versatile tool for designing product surfaces. The way it works is that a specified CAD geometry and a programmed algorithm are used to generate a structurally shaped surface. Since this method offers extensive control possibilities and operational options, it opens up completely new areas of application. In this case, we're dealing primarily with the possibilities that our method offers for the design of haptically-supported interfaces, as well as with the ambivalence of an object that is directly designed and indirectly influenced via algorithms. In collaboration with experimentally oriented partners in the handicrafts sector, the strategies we've developed will be tested in actual practice and refined in a process of reciprocal exchange.

<http://www.structurate.com>



Marcus Liebich & Clement Greiner