Eindhoven designs
volume six
This is ID’12

Each year the Department of Industrial Design showcases a selection of its student work during the Dutch Design Week. This year this resulted in ID’12: an exhibition encompassing 42 works involving stellar Final Master Projects (FMPs) as well as a wide selection of first, second and third-year Bachelor projects, non-FMP Master projects and post-Master projects (PDEng). Together these designs present a current snapshot of the journey our department has embarked upon more than a decade ago.

When the Department of Industrial Design started in 2001, it took on the challenge to educate a new type of industrial designer: a designer who, through a process of lifelong, self-directed learning, could be leading the creation of our future world. We were aiming for designers with a strong identity and a clear vision on what could be, rather than on what is; designers who would enable people to transform their lives by providing them with intelligent systems, products and services; designers who would take on the responsibility to create designs that impact society in a meaningful way.

This booklet gives an impression of the works exhibited at ID’12. In many cases the designs received the ‘Excellent’ verdict, which is the highest merit a student can obtain each semester.

Sit back, relax and catch a glimpse of what our designers of the future are capable of.

Enjoy.

The Board of the Department of Industrial Design
Index

Industrial Design at TU/e 06
Light, Space and Time 08
Culture and Subculture 20
Play, Learning and Creativity 30
Conceptual Materials and Interactions 40
Health and Wellbeing 56
Dutch Design Week 2012 66
Colophon 78
Industrial Design at University of Technology Eindhoven

The aim of the Department of Industrial Design (ID) is to educate unique opportunity creators who can design intelligent, products, systems and related services for societal transformation. The program to enable this mission is competency-centered, based on an educational model in which learning and working come together. Students are considered as junior employees who develop competencies by acquiring and applying new knowledge, skills and attitudes in an authentic setting.

Projects are one of the main learning activities that allow students to develop competencies such as “User Focus and Perspective”, “Integrating Technology” or “Social and Cultural Awareness”. Many of these projects have real industrial or societal clients. Through these realistic projects students develop their overall competence of designing by integrating their competency development and profile; the quality of their deliverables; their control over the design process and performance of activities in the reflective transformative design process; and their overall attitude (professional and personal).

Miguel Bruns Alonso
Director of Education of the ID Bachelor Program.
Light, space and time have in common that they manifest themselves only when captured by something else, whether it is a physical surface or a scheduled appointment. The projects on display within this subtheme demonstrate not only this phenomenon, but more; they show how we can influence the perception of light, space and time through intelligent designs of intelligent designers. The work exhibited here demonstrates this in a range of application areas, by showing novel, explorative interactions with phenomena that have been around since the beginning of time (and light, and space).
Solime

A mediated social experience of the breakout room

Bart Dohmen
Master Graduation Project
www.bartdohmen.nl

Coach: dr.ir. Harm van Essen
Client: TU/e Intelligent Lighting Institute

In the ‘breakout area’, an open-plan office environment, each user does his own thing. Solime is a smart lighting system that optimizes the use of this space by influencing the social interaction. Solime observes behavioral patterns and suggests, by means of certain light patterns, how workers can use the space efficiently.

Qromo

Peripheral Time Awareness based on Light and Movement Qualities

Alex Mourão dos Santos
2nd Year Bachelor Project
www.alexsantosdesign.com

Coach: ir. Heleen van Heel

The ticking clock during a presentation can be a nuisance. At companies like Google, but also during TED presentations, the clock is even projected right next to the speaker. This does not only distract the speaker, but also the audience. Qromo is a new concept which helps speakers keep the time. It is a table with an ambient light which changes during the presentation. The light changes in size, but also in a way inspired by the tides, as a metaphor for the notion of time.
Natural light and movement remain fascinating because of their ever-changing patterns. How can this experience be achieved in an artificial setting?

Breathing Lights creates a naturally calming atmosphere. Inspired by the elegant movement of spider webs in the wind, these light objects make movements that evoke associations with breathing. Since a relaxed respiratory cycle is essential to calm down, these objects invite to synchronize with their movement.

Breathing Lights
Lights inspired by the calming, elegant movements of spiderwebs

Svetlana Mironcika
2nd Year Bachelor Project
Coach: Roos van Berkel

Natural light has a certain movement which captures our attention. By investigating this movement and translating it into an artificial light installation, artificial light can also bring fascinating experiences to users. Transient Tides of Light attempts to create the natural sensation of light reflected by water. Natural relaxation through artificial means.

Transient Tides of Light
Exploring of natural light behavior and translating it into an artificial light setting

Jeroen van der Meij
2nd Year Bachelor Project
www.jeroenvandermeij.com
Coach: Roos van Berkel

Natural light and movement remain fascinating because of their ever-changing patterns. How can this experience be achieved in an artificial setting?
What does the Universal Declaration of Human Rights mean to you? The exhibition makes the visitor aware of the current relevance of this declaration. The exhibition focuses on two fundamental articles of the Declaration: the freedom of movement and freedom of expression. A number of interactive installations allow visitors to experience the application or denial of such rights themselves, evoking reflection on their perception of Human Rights in general.

The project is a collaboration between the University of Siena, Industrial Design TU/e, OpenLight and the Interactive Institute Umeå. The exhibition was opened to the public at the Santa Maria della Scala Museum in Siena, Italy, in June 2012.
People use different types of light sources for different activities. Direct light for reading, overhead lighting for instant illumination of a room. Besides, different activities typically have different locations. A magazine is usually read on the couch, the newspaper is read at a table. Lucolla is at once light source and light controller. The system’s shape can be manipulated in various ways and it is easily moved. Thus, Lucolla supports the use of light in diverse locations and for different activities.

Signum

A lighting system that reacts to its surrounding

Manon Barendse, Naomi Verdaasdonk,
Max Weetzel, Manuel Suarez
1st Year Bachelor Project
Coach: ir. Jan-Derk Bakker

Like a cloud of glow-worms, Signum – a proactive and reactive system of light artefacts – reacts to the proximity of objects in its surroundings. Signum is designed to function in public spaces as a ‘delighter’ – an object that has a positive effect on people due to its strong impulse and surprising and unexpected nature.

Lucolla

Care about your intelligent lighting through lovable interaction

Koen van Ham
1st Year Master Project
www.koenvanham.nl
Coach: ir. Remco Magielse

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**BIOTOPO**

Transcending the limits of spatiality through a sensorial experience

**Pamela Carrion**
2nd Year Bachelor Project
www.p-carrion.com

Coach: dr.ir. Mark de Graaf

BIOTOPO: living organisms hiding in the walls of a hallway, interacting with users. When you enter the hallway, the walls will deconstruct in order to attract BIOTOPO’s attentions. BIOTOPO’s behavior depends on how the user approaches the hallway. You can be seduced or followed, or BIOTOPO can play with you by creating a shock wave. The aim is to add sensitivity to an inanimate object in order to stimulate your own sensitivity. The user will transform the aesthetics of the space, resulting in a dimensional change of his perception. As user, you will be taken into a magical environment which is at once real but fantastic, tangible but distant.

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**13º**

A lighting-design that grows along with its user

Jorg de Bont
1st Year Master Project
www.jorgdebont.nl

Coach: ir. Remco Magielse

Wouldn’t it be practical if products would adapt during use and bring themselves to perfection? This is just how 13º, a small portable light, operates. Its fourteen wooden elements are all filled with LEDs that can be activated by touch. You can place 13º in whatever position you like and adjust its light to suite your needs. In addition, through repetition of use, it stores your preferences.

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Identity has recently become a frequent topic for discussion in the Netherlands, or rather, a victim of insecure times; our national identity seems to be in need of preservation. This communicates a static notion of identity, rather than seeing it as a phenomenon in continuous transformation; a manifestation of historic values confronted with the present. At Industrial Design we have a rich tradition in crossing (inter)cultural boundaries and regarding human diversity and uniqueness as enriching and inspiring. At ID’12 we devote a subtheme to projects aimed at opening up cross-cultural interaction and celebrating the idiosyncratic value of subcultures.
Imagine running and following a light which guides you through your training at optimal speeds for set exercises. No need to worry about keeping the right pace, no need to check that your timing is right. Imagine an intelligent system which listens to your heart, your breathing, your pace. A system which adjusts itself to your needs so as to guide you to reach your set goals as a runner. Whether you need to lose weight, or want to go for Olympic Gold, the intelligent, intuitive and integrated OptiTrainer system can literally guide you to reaching your goal.

Yves Florack
Master Graduation Project
www.yvesflorack.eu

Coach: dr.ir. Pierre D. Levy

Client: iisports
Kim van Iersel
Master Graduation Project
www.kimvaniersel.nl
Coach: dr.ir. Miguel Bruns Alonso

One of the biggest challenges of cooking is timing. Monitoring several pans while at the same time chopping ingredients, tasting and setting the table. CoCook can help the home cook by taking over part of the workload. After being put to the right setting, CoCook keeps track of the ingredients and produces a signal when the desired doneness is reached. Less cooking stress, more attention to creative cooking.

If you can’t stand the heat...
Relaxed cooking with system that tracks doneness of food

Koen de Greef
Master Graduation Project
www.koendegreef.nl
Coach: prof.dr.ir. Berry Eggen

My Share of Music connects the sharing of music and similar experiences to DIY 3D printing. The latter technology will soon find its way to every living room and offers boundless opportunities. My Share of Music focuses on how to create objects that are meaningful to the user. Starting with an interactive questionnaire, a unique and personal music object is created, which can be used to share musical experiences. The object does not owe its shape to technological constraints, as CDs and cassettes do, but is a distillation of the story behind the music, a story about people, music and situations that matter.

My share of Music
Share more than your music, share your experiences
Future Nostalgia

Digital music collections deserve a history too!

Mendel Broekhuijsen
Master Graduation Project
www.mendeldesign.nl
Coach: prof.dr.ir. Berry Eggen
Client: Muziek Centrum Nederland

Everyone has a few ‘special songs’. However big your music collection, hearing that one song will bring back that special moment. With Opus 6, these unique memories become part of your music collection. An app enables you to capture, collect and share personal experiences connected to a piece of music. The tracks are enriched with cues that trigger these memories. You can do this individually or with friends, or you can start a global conversation about musical memories you all share.

Ruben Delil
2nd Year Bachelor Project
www.thingweb.nl
Coach: ing. Vera Winthagen

Marathon Eindhoven aspires to become an event for everyone: runners, visitors, companies and inhabitants. The Marathon Eindhoven Community, a mobile website on the Eindhoven marathon, connects these groups. A few clicks on your smartphone will produce information on the locations of emergency posts, toilets and musical bands, and will give you the latest news on the marathon. Marathon Eindhoven Community thus creates a platform that enables runners to develop initiatives on which visitors can react.

Marathon Eindhoven Community
Connecting and involving different groups within the marathon Eindhoven
‘a Little Something’
Craft your message, show that you care

Philémonne Jaasma
Bachelor Graduation Project
www.philemonne.com
Coach: dr.ir. Miguel Bruns Alonso
‘a Little Something’ is a gift package that enables you to craft and send your personal message to a dear one. Through making, people show that they care about their dear ones; they put time and effort into a creation made especially for that one person. The result is a gesture that does not need words.

At the same time, ‘a Little Something’ is an open platform that encourages social action. Based on creative sessions, specific materials were selected for the gift package. The combination of raw, indefinable and highly tactile materials triggers the creative mind that is present in all of us. The choice for these materials led to a Cradle-to-Cradle product in which PET bottles, refrigerators and tires get a second life.

Cultural Interventions
Cocuca, a multi-cultural lesson method

Job Huberts
Bachelor Graduation Project
www.jobhuberts.com
Coach: dr. Johanna Kint
Client: Basisschool de Boschakkers
Cocuca is a teaching method that familiarizes children with the Dutch multicultural society. At home, pictures are taken of family members, the house, toys and food. Back at school, these pictures are shared in a playful manner. By playing games like memory or making a jigsaw puzzle, the children get to know the backgrounds of their classmates and cultural differences are talked about. Quite accessible, and hopefully resulting in mutual respect and fewer prejudices later in life.
The work in this subtheme show how intelligent designs can lead to engaging interactions operating between intellectual stimulation and leisure. All exhibits demonstrate new approaches towards a world that can be playful, educational creatively tantalizing without resorting to 'easy scores'. Through cleverness and finesse these exhibits pay tribute to the outstanding ability of their creators – our students - to spark playfulness and creativity in themselves, in the process of self-directed learning. As such, these exhibits also pay respect to our department.
Momics are tiny robots sold as DIY kits; children can solder them by themselves. The robots are designed in such a way that they have a technical appearance, to reduce the fear of electronics among children in a playful manner. Furthermore, Momics react to each other. LEDs on the back of the robot can stimulate another robot’s light sensors, causing it to turn towards the LED light. The greater the number of Momics, the larger the swarm. This means that groups of Momics can yield interesting play behavior for children. And using a flashlight or just a shadow they can influence the Momics’ behavior.
In order to make musical instruments more attractive to children, they should give more physical feedback. A piano key or guitar string does not give very much. OZE creates a new form of interaction with a clear relation between shape and sound. By using moldable clay, children can engage in music in a very intuitive fashion and they are challenged to explore. Besides presenting a new mode of musical interaction, OZE proposes a range of tangible interfaces.

BABABA

Interactive ball pool balls that emit sound when movement is detected

The ball pool... an iconic play object which in the past 40 years has proven itself to be a positive experience for children. Despite of its simplicity the interaction is rich and valuable for the development of a child. BABABA redesigned the existing ball pool and took the level of interaction one step further. The conventional and passive ball pool is made reactive by adding interactive ball pool balls – the BABABA’s – equipped with sound modules triggered by movement. BABABA creates exciting, social and challenging play opportunities in the existing ball pool.

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Chris Gruijters & Gijs Houdijk
1st Year Master Project
www.bababa.nl
Coach: dr.ir. Mark de Graaf

OZE

Making music more accessible through a new tangible interaction

Robin Pohl
Bachelor Project
www.robinpohldesign.com
Coach: Bert Lonsain
Client: Klankspeeltuin

In order to make musical instruments more attractive to children, they should give more physical feedback. A piano key or guitar string does not give very much. OZE creates a new form of interaction with a clear relation between shape and sound. By using moldable clay, children can engage in music in a very intuitive fashion and they are challenged to explore. Besides presenting a new mode of musical interaction, OZE proposes a range of tangible interfaces.
Tangible feedback on finances

A tool to teach vocational students to cope with their finances

Bob Spikman
Master Graduation Project
www.spikmandesign.nl
Coach: dr.ir. Philip Ross, Flip Ziedses des Plantes
Client: Weet Wat Je Besteedt

Digital banking is becoming increasingly popular. Although it makes paying a lot easier, it makes it harder for young people to get a sense of the actual value of money. A tangible tool connected to the digital account will give users a better grasp on their financial possibilities. Using tangible coins, young people can easily map their monthly expected expenses and savings and keep financial trouble at bay.
Bunpou Blocks
A tangible solution for learning (Japanese) grammar

Learning a new language is often a difficult process. A good start is half the battle. Tangible learning tools can be of help, but usually focus exclusively on enlarging one’s vocabulary. Bunpou Blocks shows that tangible learning tools for grammar—despite its complexities—are feasible. The extensive set of analogue puzzle blocks gives the student a tool providing insight into the underlying structure and meaning of (Japanese) grammar.

Martijn Kors
1st Year Master Project
www.martijnkors.com
Coach: prof.dr. Kees Overbeeke

Time perception ike
An interactive and intelligent planner that changes time perception for autistic children and their parents

Planning the day is very important for autistic children. ike is a planner that does not base day planning on regular time measured in hours, but on the times of the three meals: breakfast, lunch and dinner. ike also takes into account specific qualities and features of autistic children, like photorealistic thinking, a preference for clear structure, and creativity. Dealing with time in this way and letting the children draw their own planning creates more flexibility in the lifestyle of child and parent. ike does not count time, it makes time count.

Bas van Hoeve
Bachelor Graduation Project
www.basvanhoeve.com
Coach: dr.ir. Geert Langereis
As designers of the future ID students explore opportunities, rather than problems; they envision potential future societies and anticipate on the repercussions on the craft of industrial design. This encompasses among other things exploring new materials and forms of interaction, but also touches on the ethical implications of our design decisions. This subtheme presents a conceptual look at the future of living with artifacts. And vice versa.
Tingle
Rethinking Musical Instruments for Learning

Rhys Duindam
1st Year Master Project
www.nupky.com

Coach: ir. Hans Leeuw

Tingle is a new instrument that uses alternative ways to teach children music. Based on the pin board toy from the nineteen eighties, it playfully shows how sounds and music are created and at the same time generates a musical landscape. This metaphor makes it easier for children to link their actions to the created sounds.

Unlace
An interactive lace lingerie garment enhancing partners awareness of touch, time, and warmth

Eef Lubbers
Bachelor Graduation Project
www.eeflubbers.com

Coach: Kristi Kuusk
Client: CRISP

Unlace is an interactive lace lingerie garment which allows partners to connect by becoming more aware of touch, time and warmth. The man’s touch on the lingerie causes the surrounding fabric to slowly heat up and change from black to skin color. This stimulates a further ‘undressing’ of the woman, guiding the man’s hand to another spot to touch. The slow warming and color change enhance the sensation of touch. Thus, Unlace turns exploring the woman’s body together into a unique experience.
During rescue operations, firemen often lose a lot of time searching a building for possible victims. Smoke and dark surroundings hinder this search. The Whisker, a special fire mask, helps firemen find their way in dark, smoke-filled buildings. Ultrasonic sensors can sense objects like walls and doors in hard-to-see surroundings. A visual light interface in the helmet transmits this information to the user.

The Whisker
A firefighter mask that helps with way finding in the dark

Koen Beljaars
Bachelor Graduation Project
Coach: Melissa Coleman Msc
Client: Dräger
Coffeehouses in the Netherlands are getting increasingly popular. Most visitors come to take a short break from their busy lives or use the coffeehouse as a workspace. Nevertheless, interaction between regular customers is rare. Catch! is a simple game encouraging you to interact. Through a simple movement across a table cloth, the user throws a light to another customer. In this playful manner a first contact is made. Besides being a contact game, Catch! is also an exploration of the possibilities for making textile touchpads.

Khalisi: Aesthetic interaction with light
A system of dynamic lamps

Kacper Holenderski
Master Graduation Project
www.holenderski.com/kacper/
Coach: dr.ir. Joep Frens
Khalisi is a system of identical spiral lamps that open and close, creating a special light effect. The magic of Khalisi is in the interaction with the lamp, which reacts to up-and-down hand movements. An added value is that with one hand movement one can control multiple lamps. Khalisi also has a self-actuated mode where the spirals constantly open and close providing a relaxed yet dynamic atmosphere. Khalisi has been designed for the home environment but these lamps also fit other contexts, e.g., entrance to a hotel, café terrace, etc.

Catch!
Stimulate interaction between customers in coffeehouses by a game on a touch-sensitive tablecloth

Xander Meijering
1st Year Bachelor Project
www.xandermeijering.com
Coach: ir. Maarten Versteeg
Coffeehouses in the Netherlands are getting increasingly popular. Most visitors come to take a short break from their busy lives or use the coffeehouse as a workspace. They also come to see familiar faces or mix with people. Nevertheless, interaction between regular customers is rare. Catch! is a simple game encouraging you to interact. Through a simple movement across a table cloth, the user throws a light to another customer. In this playful manner a first contact is made. Besides being a contact game, Catch! is also an exploration of the possibilities for making textile touchpads.
Body language is the dominant form of communication regarding all living things. However, when communicating with our products we solely depend on interfaces, without incorporating subtle elegant communication such as body language. KIK is a kinetic light object that researches whether it is possible to communicate through body language. By means of perceptual crossing, internal product processes can be communicated in an unobtrusive manner.

KIK – Product Body Language
Kinetic light object communicating through body language

Erik Swaagstra
2nd Year Master Project
www.swaagstra.com
Coach: dr.ir. Rene Ahn

Many everyday traffic accidents are caused by the use of headphones. Wearing headphones cuts the user off from ambient sounds and hinders social interaction. Helixear, a headphone set with an innovative design, is created to counteract these problems. It combines both worlds by allowing the user to listen to music while remaining aware of surrounding sounds. In addition, the movable ear cups turn the headphones themselves into a means of communication: I am or am not open to interaction.

Helixear
A new way of communicating and listening to music

Alex Mourão dos Santos
2nd Year Bachelor Project
www.alexsantosdesign.com
Coach: dr.ir. Rene Ahn
NO-plug ‘n play carpet

This carpet brings electricity there where it is needed

Marjolein Kors
2nd Year Bachelor Project
www.marjoleinkors.com

Coach: Simone de Waart

Is your phone battery always empty? Do you regularly trip over cables? And is your power strip not always sufficient? The NO-plug ‘n play carpet is the solution! Just connect the carpet to the electricity network and it will offer a low voltage power to all of your frequently used electronic products such as cell phones, lamps, computers, game consoles, cameras and laptops. At any place you want. The NO-plug ‘n play carpet, inspired by the ancient chainmail craft, is a safe and user-friendly solution to a modern irritation.

Adaptive & informative skin

Product longevity created by product skin

Meerthe Heuvelings
1st Year Master Project
www.meertheheuvelings.com

Coach: Ronald van Tienhoven

A worn leather bag, a loved stuffed animal, or a battered table – all examples of used products affected by human hands. These traces of use in the material are perceived as an added quality rather than a loss.

Such material qualities are less visible on modern electronic products, like a computer or a smartphone. Although the embedded hardware and software are updated regularly, the product’s skin could have a life of its own, a life that is affected by the interaction. The creation of wear and tear on modern products, created by the handling of a product, illustrates product attachment. This could lead to an extension of the use phase of a product. This wear and tear can be a quality; it grants the product a history.
Living spaces often serve multiple purposes, especially student rooms and small apartments. One uses the room to sleep, eat and relax. Lighting can be used to create an atmosphere matching the room’s current function. A lighting system was designed which easily adapts to the space, function and user. The system includes a set of lamps that are connected but can be placed in different locations. The lamps have variable intensity, color and orientation. Through repeated use, the system ‘learns’ the user’s preferred settings for creating certain atmospheres, thus gradually reducing the need for user input. Extra apps can give the lighting system an entirely new function, like sleeping coach, wake-up light or diary.

Willem Willemsen
2nd Year Master Project
Coach: dr.ir. Harm van Essen

Wwijnz
Perceptual qualities in wayfinding

Wwijnz is a wayfinding tool that helps visitors of the Catharina hospital. The helpless search for the correct route is history; Wwijnz tries to grab your attention, helps you understand the wayfinding-system and shows you your next step. Wwijnz clarifies how the policlins, routes and directional signs are connected. The system makes use of perceptual qualities that we all have, such as eye-contact, and communicates through a body of signal elements that can physically move. Wwijnz wants you to take your next step in the right direction and with more confidence.

Sippe Duisters
Master Graduation Project
www.sippe.nl
Coach: ir. Eva Deckers
Client: Catharina Hospital Eindhoven

Wwijnz
Perceptual qualities in wayfinding

Lighting the multifunctional room
Dynamic light atmosphere matching the space, function and user

Willem Willemsen
2nd Year Master Project
Coach: dr.ir. Harm van Essen
As human-beings, we explore the world and our immediate surroundings in an active way. What if objects start behaving in the same way? Manoeuvre is an interactive table that observes and feels in a human fashion. If Manoeuvre wants to know it is being touched, it has to move towards you. This creates an interesting relation between object and user, which is essential to get a feeling of involvement.

Jorg de Bont
1st Year Master Project
www.jorgdebont.nl
Coach: dr.ir. Rene Ahn

Kinetic Folds
Investigating our relationship with objects that seem alive

Kevin Nørby Andersen
1st Year Master Project
www.kevinandersen.dk
Coach: dr.ir. Pierre Levy

A first encounter with a living creature – a street cat – produces a short moment of anticipation, where you try to figure each other out. How does a first encounter with an object work? How about an object that seems alive? Kinetic Folds breathes when no one is near, but shies away when it feels a human touch. How do you react? Besides providing interesting insights for future research, the object serves as an example of how research can be done through design.

Manoeuvre
When intelligent objects have to move in order to sense
Health and wellbeing have always been of great interest for the department of Industrial Design but will become more relevant in the decade(s) to come. For example, it is evident that ageing will in the near future need to be reapproached with an eye on socio-emotional factors such as prolonged independent living, a sense of belonging and giving meaning to one’s life after losing a loved one. These are only a few examples in an array of related issues, not even mentioning the economic consequences of an ageing society. Other relevant topics in health and wellbeing include obesity and creating healthy eating patterns, stress-reduction and active living. To name a few.

Play, Learning and Creativity
As visually impaired or blind person you cannot observe the way your conversation partner is looking at you. This is why Sett—Norwegian for ‘to see’ or ‘seen’—makes this visible in a different way during social interactions. Sett hopes to aid the integration of these handicapped people into society. Through the use of a bracelet that converts the images of the camera glasses into tactile information tangible perception is created with the sighted conversation partner. When they look at each other the bracelet will vibrate. The variation and intensity of the vibration represents the contact between both persons. By improving the ‘mutual’ perception between the blind and sighted, social involvement and mutual interest can be increased. Sett does not try to restore sight; it only wants to improve the quality of life by making use of some essential aspects of ‘sight’.

The beauty of stress

Decorative information, which shows the general stress level of a group of people

Hugo Christiaans
Bachelor Graduation Project
Coach: dr.ir. Geert Langereis

Sett

A tool for the visually impaired or blind person

Fabienne van Leiden and Jasper Schenk
Bachelor Graduation Project
www.fabiennevanleiden.nl
Coach: dr. Dirk Snelders
Client: Philips Design

The Beauty of Stress visualizes the stress levels of a group of working people by means of ink droplets. Both high and low stress levels lead to a beautiful design. The ink container will be refreshed at specific time intervals. This cycle allows workers to take a break and consider their own and their colleagues’ stress levels. The beauty of Stress aims to break the taboo on stress at work by focusing on social factors. This will enable workers to discuss stress without explicitly referring to themselves.

The beauty of stress

Decorative information, which shows the general stress level of a group of people
In Sickness & In Health

Tokens for connecting severely ill people with their social environment

Coach: prof.dr.ir. Berry Eggen
Client: Vodafone

When one is diagnosed with a severe illness, language often fails. In such cases, the tokens of In Sickness & In Health can be of help. Before you inform a loved one about your illness, you can create a special bond by ordering a set of linked tokens. These become a symbol for your special relationship. When rubbed for a prolonged period of time, the token will start to glow more intensely, also at the side of the person who is gravely ill. This will tell the sick person that somebody is thinking of them. In Sickness & In Health adds a new dimension to communication during a severe illness; it lowers the threshold to engage and makes do without words.

Marco van Beers
Master Graduation Project
www.marcovanbeers.nl
Onmi
A respiration health device that is meaningful to people

Idowu Ayoola
Bachelor Graduation Project
Coach: dr.ir. Koert van Mensvoort
Client: Philips Netherlands BV

New technologies create more and more possibilities for personal care. These allow us to have more control over our own health and seamlessly fit healthcare into our daily lives. Onmi monitors respiration as an indicator of general health. Using specific camera technology, Onmi measures the respiration pattern and provides natural feedback through movement. In addition, Onmi can change or train the breathing pattern, which makes it suitable for persons with asthma or bad breathing habits.

This project is in collaboration with the vital-signs team at Philips Research.

Ollie
A cuddly animal promoting comfort in Neonatal Monitoring

Rik van Donselaar
Bachelor Graduation Project
www.rikvandonselaar.nl
Coach: dr. Wei Chen, prof.dr. Sidarto Bambang Oetomo

Ollie is a cuddly animal that promotes communication between parents and their premature baby in the neonatal intensive care unit. Ollie helps parents understand the feelings of their baby and shows them what their infant does and does not like. By linking the emotional sweating and the mobility of the baby a new form of communication is created that can offer comfort and consolation.
Everybody knows that stress is unhealthy. Everybody also knows that having a moment to yourself can relieve stress. This is why taking breaks during work is very important. It turns out that non-smoking employees take fewer breaks than smoking employees. With Little Devil, non-smokers also have a good excuse to take a regular break. This concept adopts an alternative approach to relieving stress and tries to influence human behavior in such a way that dangerous stress levels are avoided.

Rhys Duindam  
Bachelor Graduation Project  
www.nupky.com  
Coach: dr. Dirk Snelders

Michelle  
A novel reanimation dummy designed as the real human

Mark Thielen  
Master Graduation Project  
Coach: dr.ir. Frank Delbressine  
Michelle gives assistance during the training of CPR (cardiopulmonary resuscitation). Modelled on the real human body, Michelle provides trainers and trainees with detailed information on how the body reacts to their actions: chest compressions and air ventilations. By offering accurate information on blood and oxygen displacement through the body, trainees can improve their CPR skills. This will increase the survival rate for people who might need CPR in real life.

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During the Dutch Design Week the Eindhoven University of Technology shows how technology, design, science and education join and reinforce each other. From 20 until 28 October there were various exhibitions, presenting a special mix of innovating power and technology and inviting the visitor to explore. The ambition Eindhoven, the city of knowledge, technology and design can be found in a number of projects on and around the TU/e campus. Design at its best stimulates users, researchers and business together to envision the society of the future.

**Design Cares**
TU/e, DAE, Helsinki, Volle Kracht

**Design United: Design Changes**
Curator TU/e dr.ir. Tilde Bekker, TUD, UT

**Escape**
Curator dr. Wei Chen

**Gebaarboerburgerian**
DesignChoreographies and more
Ir. Sietske Klooster and Designing Quality in Interaction Group

**ID12**
Curator dr.ir. Bart Hengeveld

**Light trough Culture Ankara**
TU/e Intelligent Lighting Institute

**NANO Supermarket**
Curator dr.ir. MFA. Koert van Mensvoort

**Smart Design Paviljoen Alumni**
Curator ir. Stephan Hoes

**Wearable Senses**
Curator ir. Maarten Versteeg

**ConceptLab**
Study Association Lucid and Studium Generale
Colophon

Team ID12

Project leader
Jeanette Schoumacher

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Participating students
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Bart Hengeveld
Miguel Bruns
Jeanette Schoumacher

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Mark van der Gronden

Graphic Design
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Webdesign
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