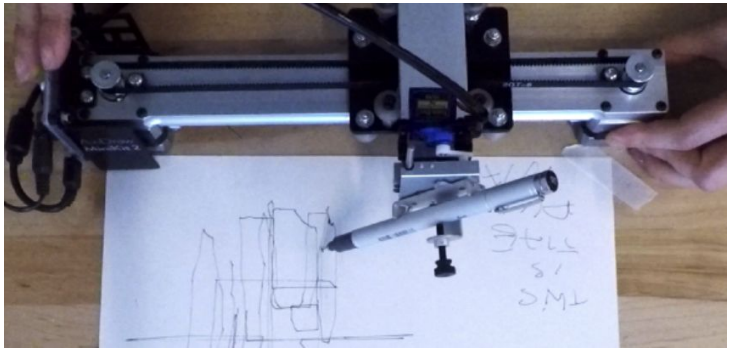
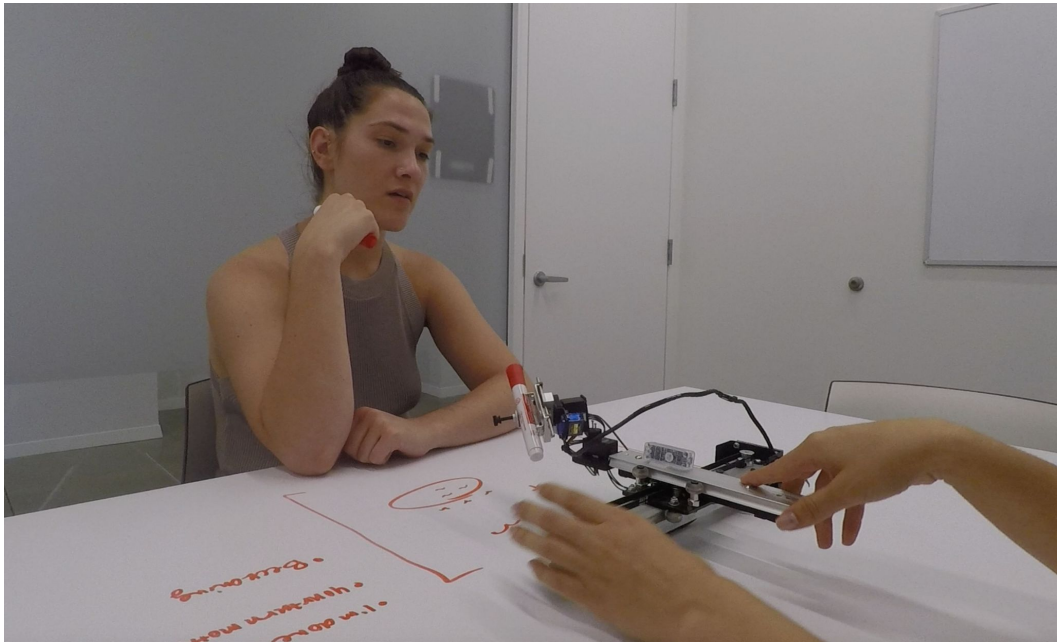
Plotter Art (2020-2024)

As part of my PhD dissertation, I experiment with artistic workflows and ways to use the AxiDraw pen plotter.

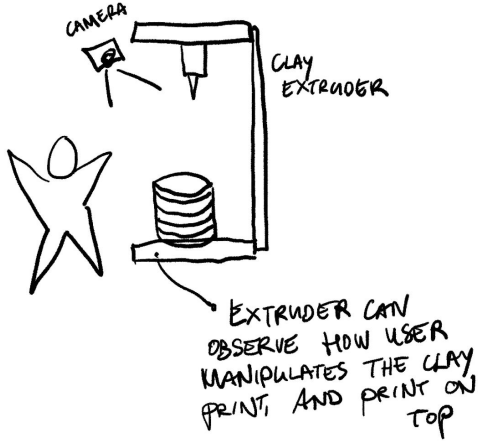
Machine Movement (2020-2024)

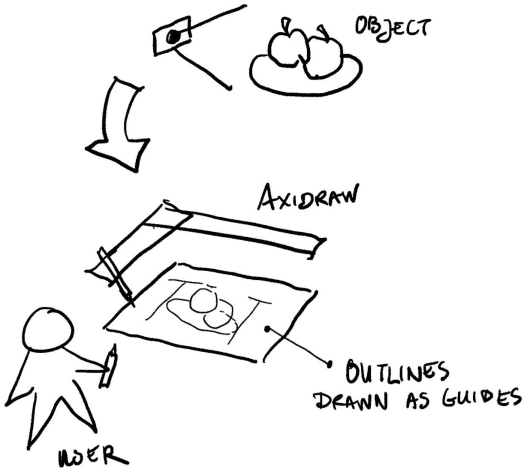


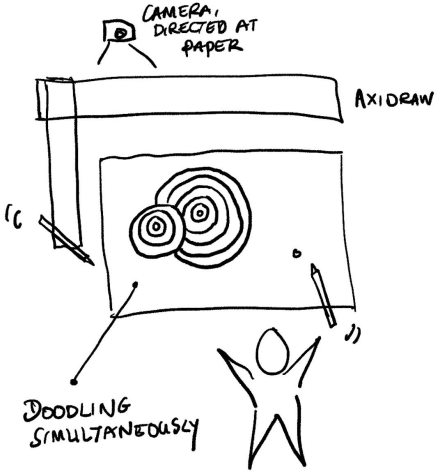


I also study the communicative properties of machines and how they facilitate communication. This work involves collaborations with comedians, dancers, and mechanical engineers.

Collaborative Machines (2020-2024)

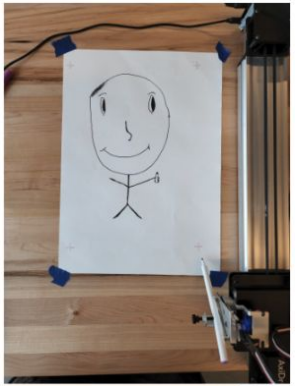


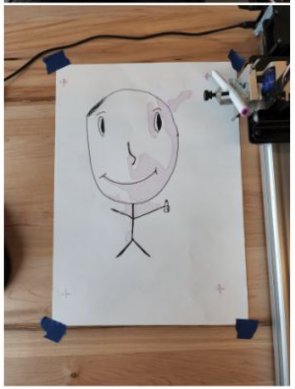


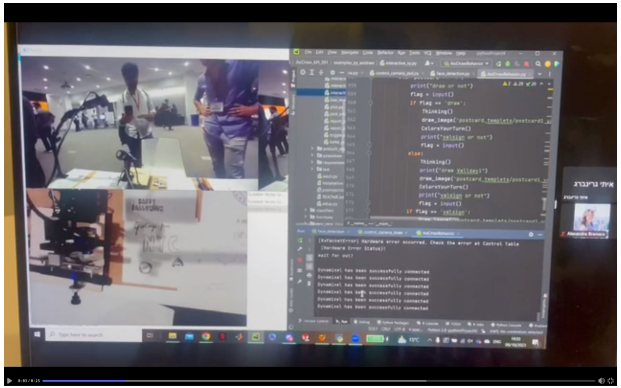


I envision, enact, and prototype new ways of collaborating with creative machines.

Wizarding Machines (2020-2024)

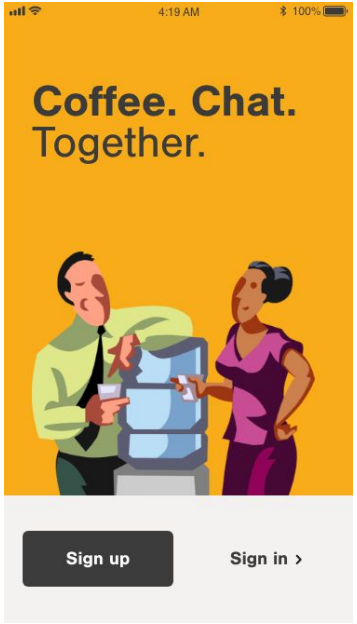


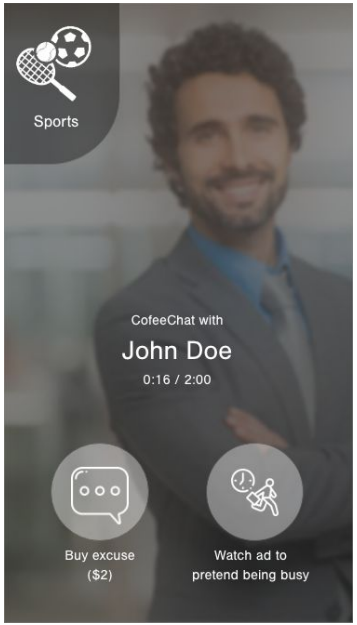


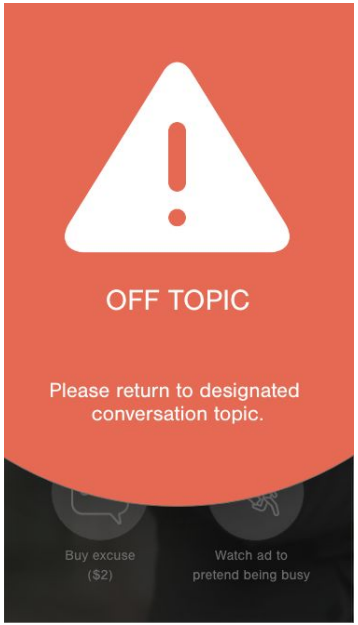


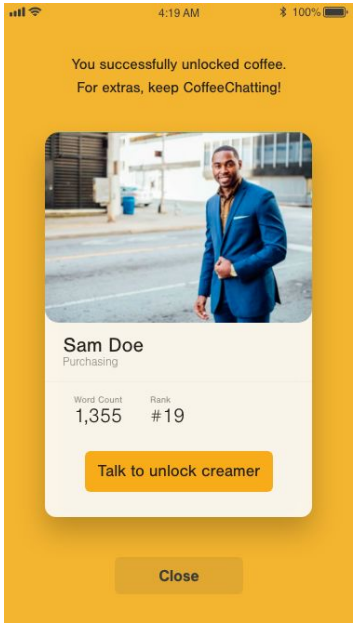
These interactions are built into Wizard-of-Oz systems with various degrees of autonomy.

CoffeeChat (2020)



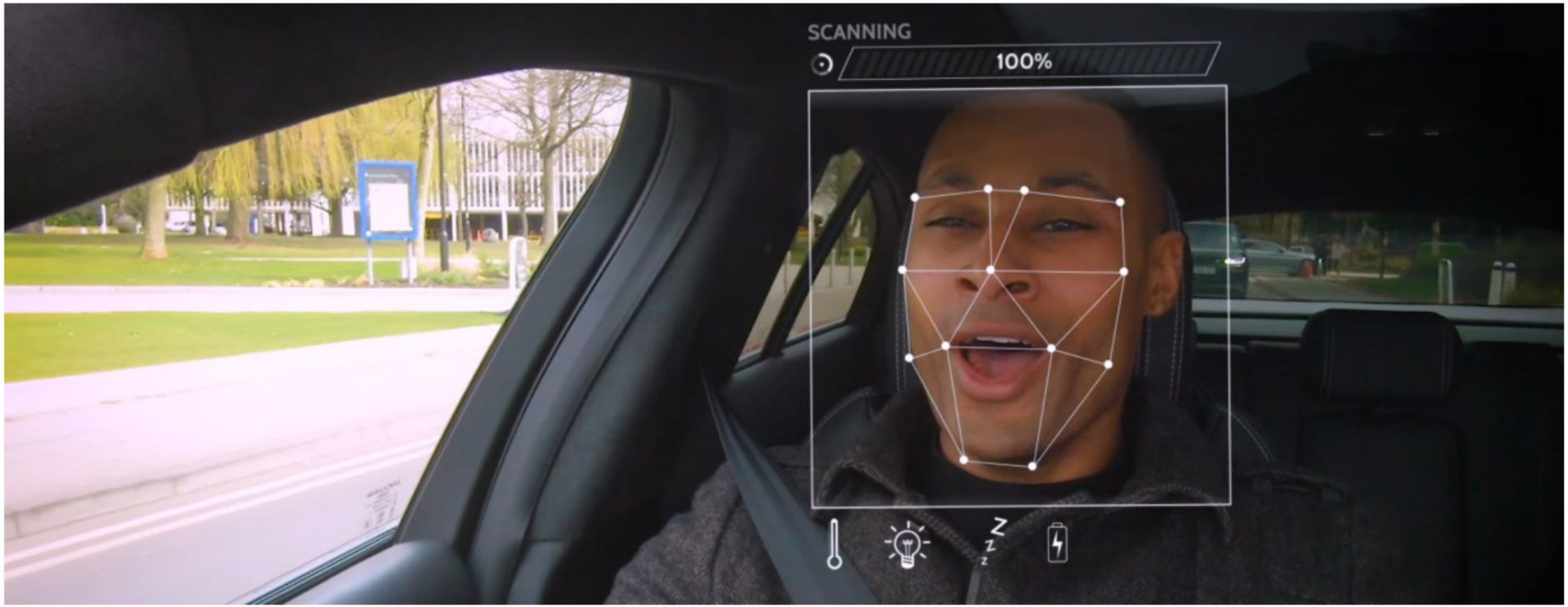






CoffeeChat is a design for a fictional app that brings the office watercooler talk to your home setup. You cannot get coffee without discussing sports with John. The design questions the role of computer-mediated communication and the proliferation of apps that claim to bring people together.

The Car That Responds to Your Mood (2020)



“Jaguar Land Rover is researching new artificial intelligence (AI) technology to understand our state of mind while driving – and adjust cabin settings to improve driver wellbeing.”

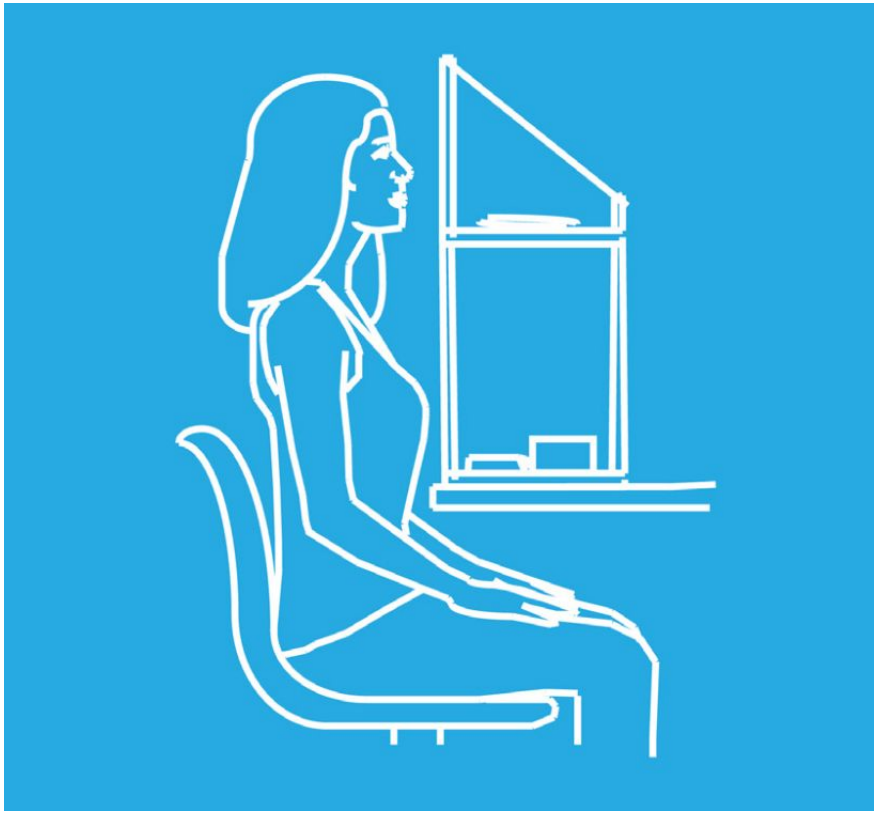
Source: https://www.jaguarlandrover.com/news/2019/07/car-responds-your-mood-new-jaguar-land-rover-tech-helps-reduce-stress

3D AR HUD Displays (2018)

I conducted two perception experiments to understand depth perception around the perspective cue, in a Head-Up Display, to inform engineering and design.

The image shows a schematic depiction of one of the experimental setups.

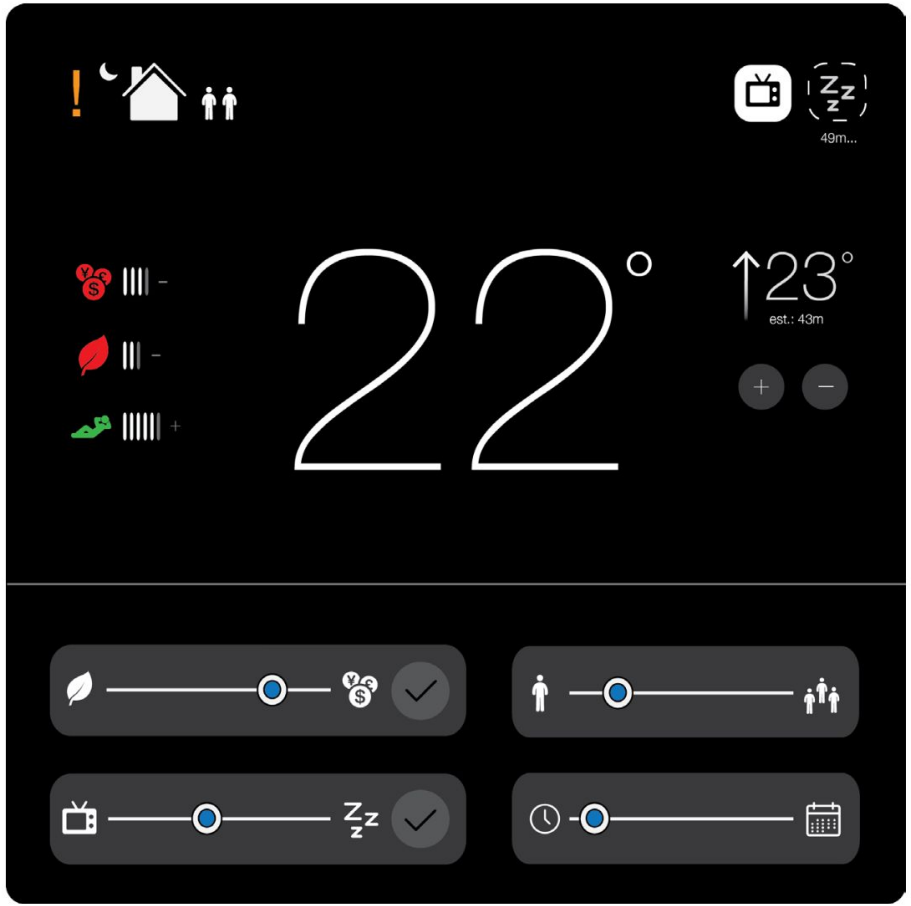
This work was part of my master's thesis in Artificial Intelligence. The project was done in collaboration with Jaguar Land Rover and the University of Cambridge and the findings were published in the Int. Journal of Human-Computer Studies (Bremers et al., 2021)



(Super) Smart Home UI (2017)

A graphical user interface was designed to include additional preference controls and information regarding system status of a complex smart home system. The design process gave insights to the technical side of the system, and the design served as a design probe during semi-structured qualitative interviews, which were used to inform engineering decisions.

This project was done during an internship at the NTU IoX Center in Taipei, summer 2017.



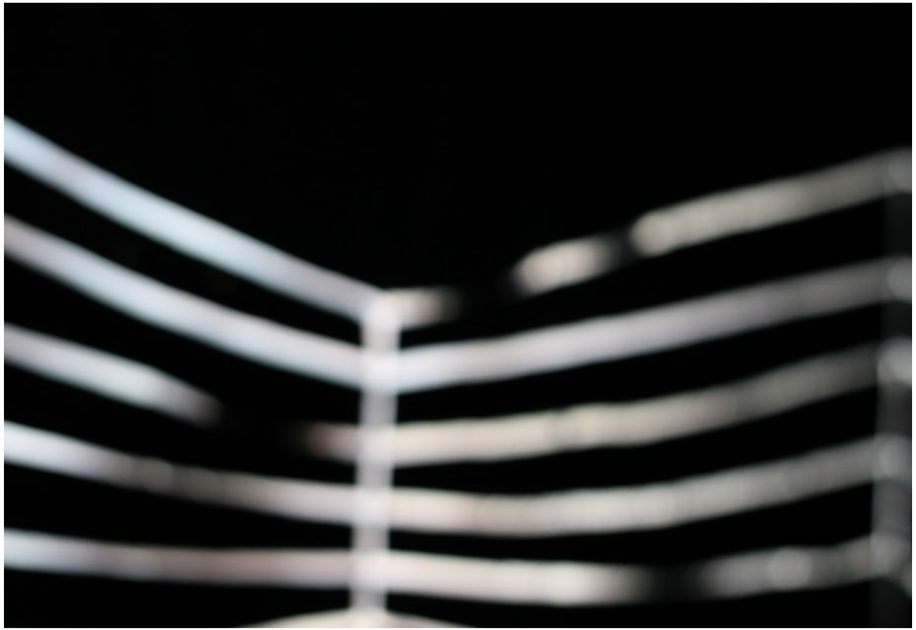
Embroidered Radio Receivers (2016)

I developed AM crystal radio receivers based on machine-embroidered coils. When a person covers the receiving coil with one hand and the antenna (also being an embroidered coil) of a transmitter with the other, they could listen to music.

The coils were created based on a Processing program
that generated a .pdf file based on a specified number of windings and diameter of the coil, which was then converted into .dst and embroidered with a digital embroidery machine and multi-kernel isolated copper thread.

This was my B.Sc. graduation project at Industrial Design TU/e, Wearable Senses lab.

Chiaroscuro (2015)



This light installation, based on retro-reflectivity, consisted of a dark room that would be experienced in groups. One person would wear LED-implemented eyeglasses, which would enable them to see the art covering the walls.

Speculative Design (2015)

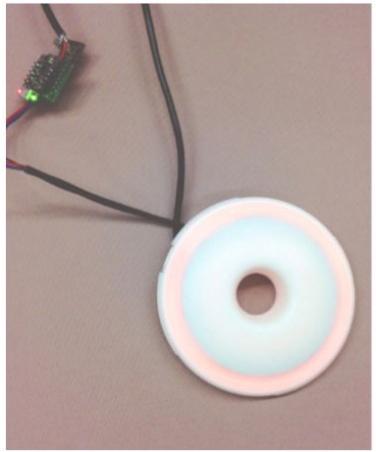
I spent 5 months as an intern at Next Nature Network in the fall semester of 2015.

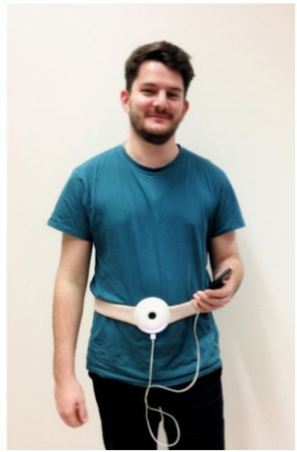
I was responsible for the finalization of the Bistro In Vitro Ice Cart project, exhibited at the Dutch Design Week.

Another project I delivered was a prototype for the Nano Supermarket exhibition. The prototype embodied the story of a hypothetical belt which could be used to charge your phone on belly fat.

The prototype that we delivered was battery-powered and featured a dynamic light design which could be controlled with a remote for demonstration purposes.

I designed this together with another intern.





Fast, Intense, and Repulsive (2015)

This project was part of a course on the expression of aesthetic qualities through visuals and materials. At first, we made a collage around the words ‘fast’, ‘intense’ and ‘repulsive’, based on magazine images and Photoshop.

Starting from the collage, the assignment was to develop a set of objects in which the aesthetic qualities from the collage where expressed. The final objects were made from clay that was polished with a spray painted finish (top right), wood (middle right) and carved potato with alpaca wool (bottom right).

The project was done with a partner during the second year of my B.Sc. in Industrial Design, TU/e.

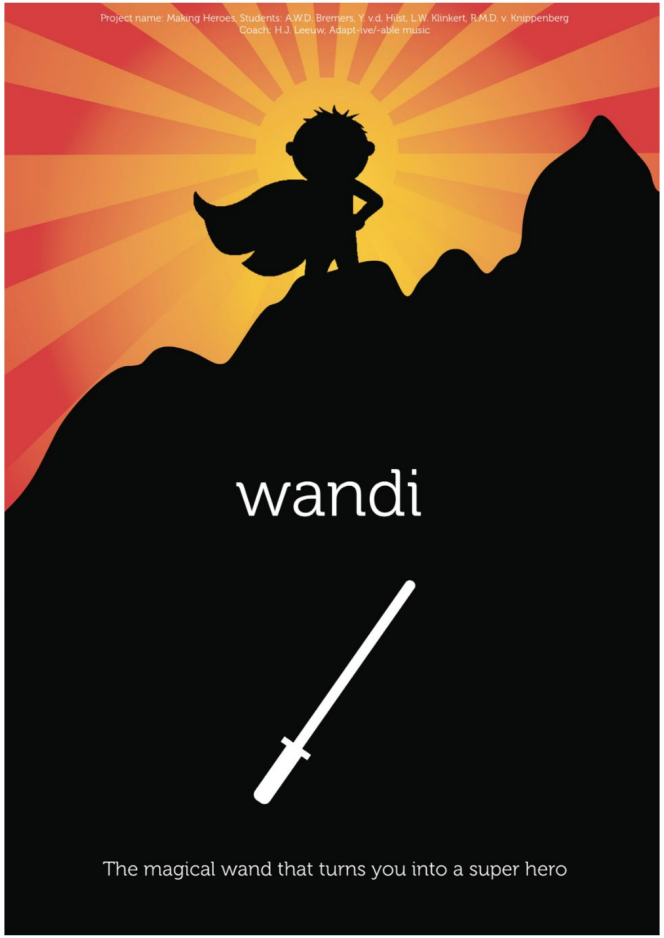
Wandi & Kepi (2014)

The aim of this project was to design a musical object for children with disabilities.

From user studies with a patient with Smith-Magenis Syndrome, we learned that among other symptoms, a lot of times these patients suffer from low self-esteem since they realize that they can do less than their peers. Also, these patients seemed to prefer playing with toys that had sound effects.

We developed the concepts of Kepi and Wandi, a superhero cape and a wand that would accompany movements made by the patient with superhero sound-effects. A technical prototype was made using Teensy, XBees, gyro/acc. sensors and MaxMSP.

This was a team project in my first year of my B.Sc. in Industrial Design, TU/e.



A Post-Modern Entrance (2013)

As a part of a course on design history, during my B.Sc. in Industrial Design at TU/e, we were assigned to design a new (concept) entrance for the Groninger Museum, based on the ideas of postmodernism.

I started with the idea to use cacti, not only because it would evoke strangeness when placed in front of a museum in Groningen. A cactus is a sturdy plant that survives in difficult climates, that looks dangerous but is crucial since it reveals to man where water is. I found this an interesting metaphor for the role of art in society.

Two cacti could easily serve as pillars for a temple entrance. I added a triangle to resemble the Greek tympanon, as well as two contrasting circle halves to create a more balanced whole.

The result looks comical and ironic, but given that the assignment was on postmodernism, that was more or less the goal.