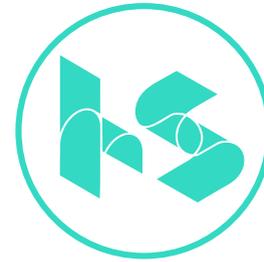






hackSpace Manifesto



hackSpace: A workspace where people with common interests, often in computers, machining, technology, science, digital art or electronic art, can meet, socialise and collaborate.

The **hackSpace** is the newest workshop at Kingston, born out of the clear demand for an electronics and programming lab that became apparent in a number of recent student projects. The goal of the space is to merge digital and physical mediums, and provide a space for students to prototype and learn about electronics and physical computing.

The facility offers a variety of inductions into processing and arduino, a microcontroller that can be used to read sensors that detect the world around us and respond to them in a variety of ways. We also offer a 3D printing service that mirrors what's available in the 3D workshop.

After an induction the workshop is free for all and encourages collaboration between all courses and skill sets. This is an exciting time for the **hackSpace**, as the direction it moves in is truly determined by the students that choose to use it.

What is available:

Arduino Uno and a selection of other microcontroller boards, 3D printing, electronic components, sensors, space to work in, computers, soldering stations, tools for prototyping and hackable broken electronics.

HACKSPACE COMPETITION (2017)

The hackSpace Workshop and the Interdisciplinary Project launched the hackSpace Award. The award invites all students across Kingston School of Art to submit projects to a number of open briefs and is a opportunity for anyone who would like to learn and utilize coding and electronics within their portfolio. Flora Macleod (Graphic Design BA) won this years competition with her project entitled Considerate conversation. The prize was a DIY 3D printer construction kit.





hackSpace
competition
Winner 2017

Flora Macleod
Considerate Conversation



LEVITATING WATCH STAND - UNIFORM WEARS (2014)

Having to design a watch stand for the company Uniform Wears, I had to not only take into account the credo of the company, its look and style, but also create something that would stand out from the crowd. The floating watch stand levitates in the air, focusing the attention on the stand itself and then directing it to the watch, which is suspended mid-air.

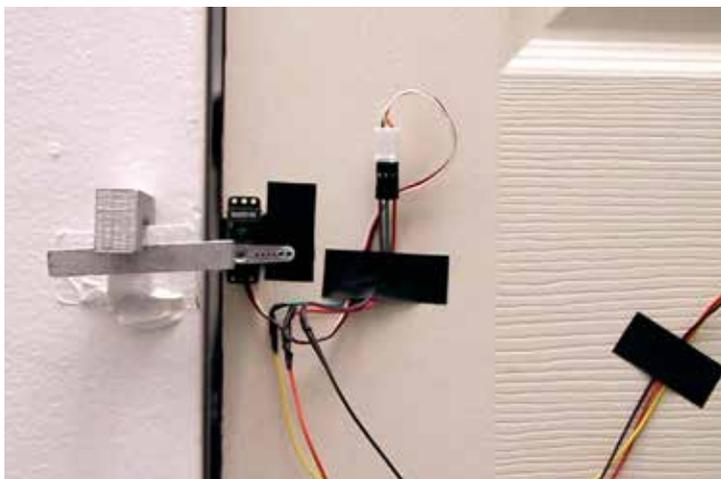
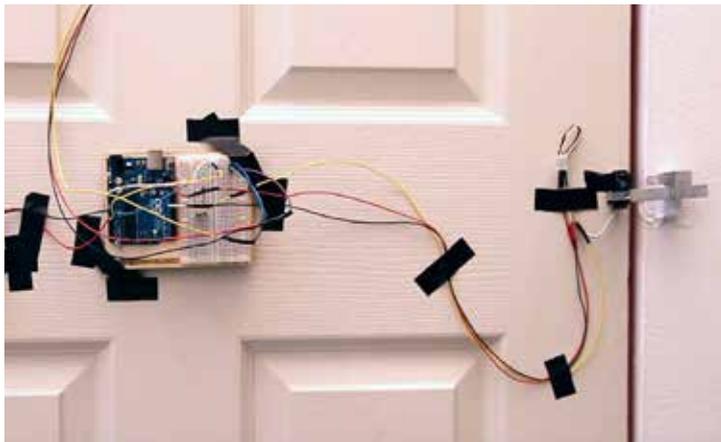
Project Designed by Sebastian Kamil Oglecki, Product Design & Engineering BSc



OPEN & CLOSE (2015)

When unable to open a door because it is locked or obstructed it can sometimes feel frustrating and can induce feelings of anger in people. So we thought what if there was a door that would positively respond to this kind of behaviour and dissipate it, in an attempt to make the world a less angry place.

Project Designed by Rowan Minkley, Ben Eager, Emily Godfrey, Rosie Denton and Karen Tsang, Graphic Design BA



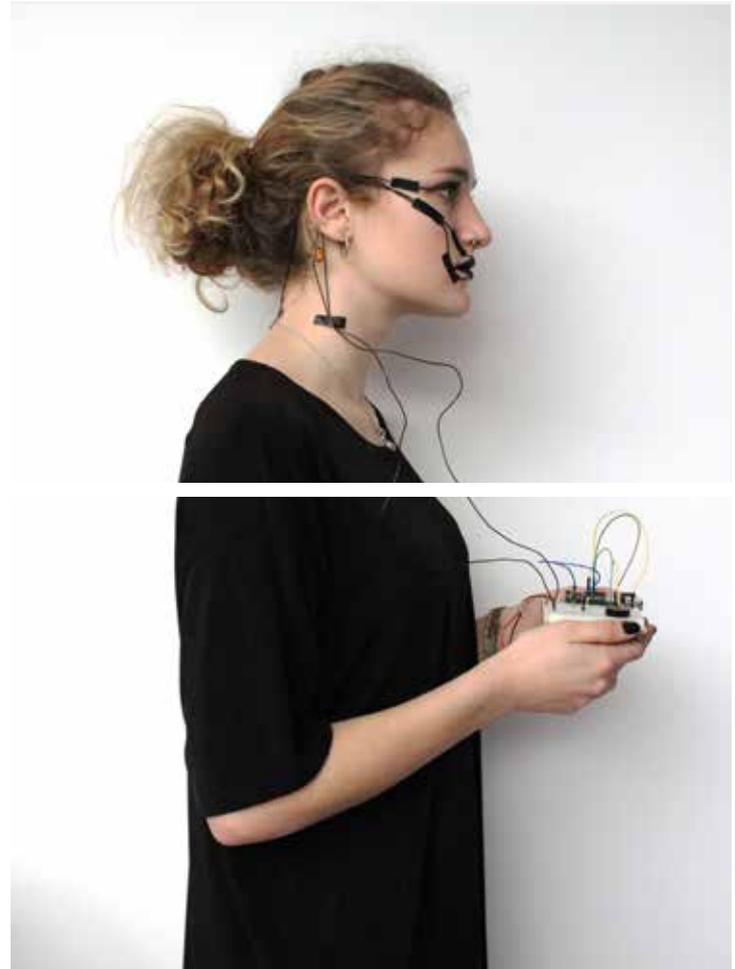




THE HOUSEHOLD OF THE FUTURE (2015)

Can you control household appliances with your face? Open / Close is a project imagining a futuristic reality in which movements of the face control and manipulate the way we behave. When your eyelashes touch for more than a few seconds, this completes a circuit and sets a buzzer off, alerting the user if they start to fall asleep.

Project Designed by Celia Delaney, Graphic Design BA

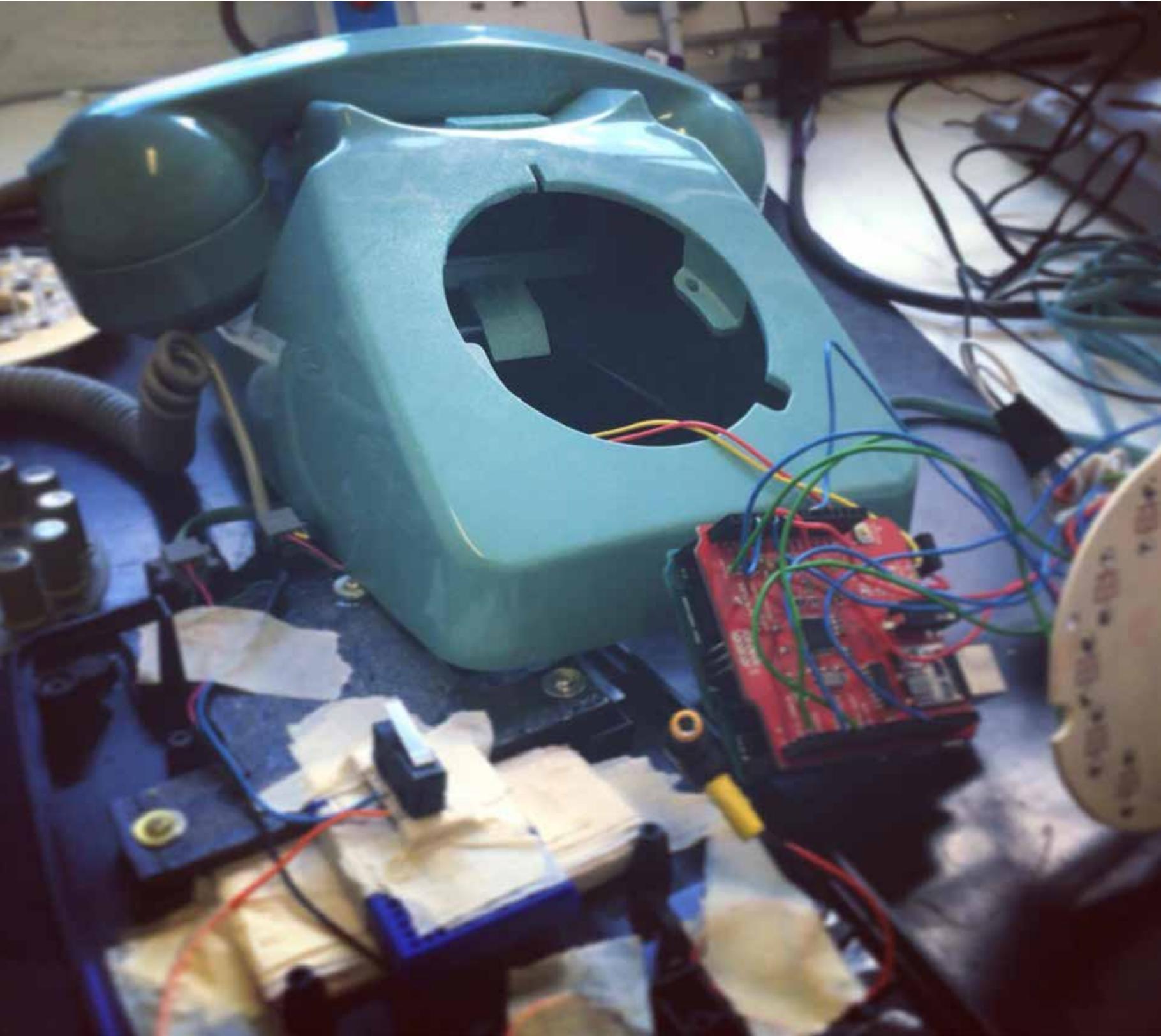


WHAT'S ON YOUR MIND? (2016)

To remove Facebook as a digital reading experience, What's On Your Mind presents the audience with an intimate and interactive audio environment. Participants can dial specific numbers on the analogue telephone to listen to conversations impersonating nine different Facebook characters. Each character is assigned with a unique telephone number that can be accessed by selecting a telephone advert inside the accompanied newspaper.

Project Designed by Rukia Sultana, Fine Art BA



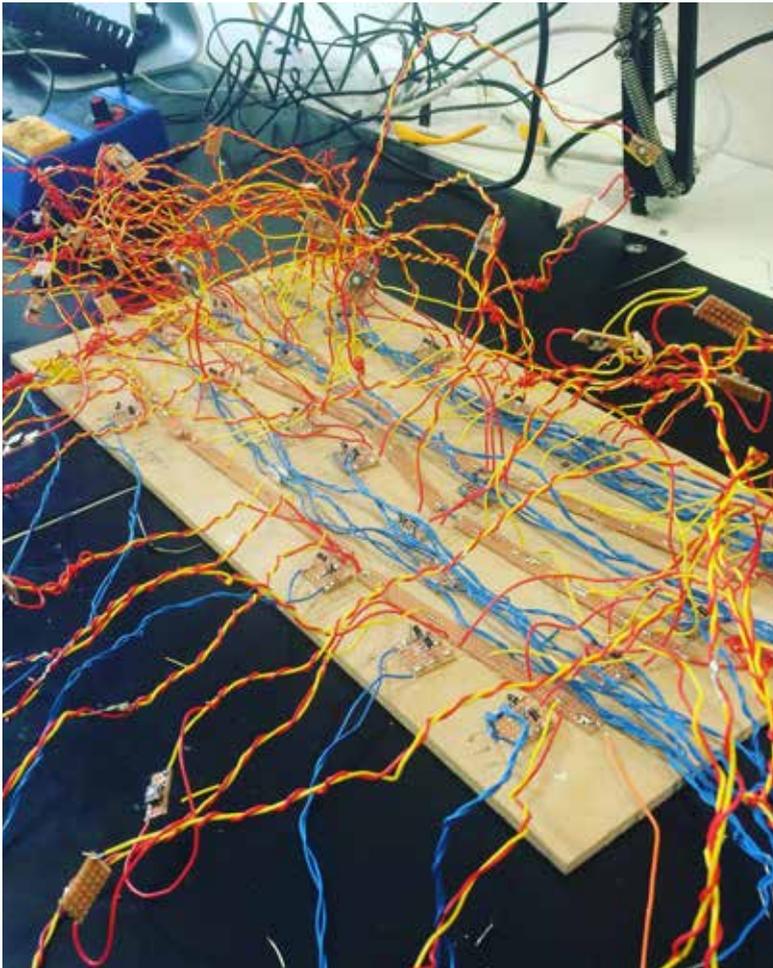




CASEBOARD (2016)

Using Caseboard, you can type messages, but there is no backspace. If you wait too long between words, stalling phrases are added. This interface asks users to reflect on their own speech patterns. Do your online and offline selves... uh... talk in different tones? Do you feel at ease when a keyboard... like... doesn't wait for you?

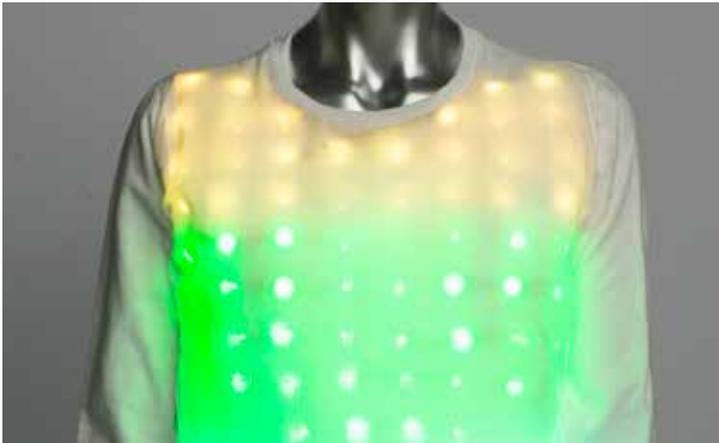
Project Designed by T.r. Bennett, Graphic Design BA



UGLY-PRETTY (2016)

The project talks about the subjectivity of taste and condemns judgmental behaviour over what people choose to wear. The intention is to show that style is not an algorithm, there is no rights or wrongs. The gaze reactive piece of clothing responds with attitude when it detects someone staring at it. The project invites the celebration of bravery instead of judgment and criticism of people's clothing choices.

Project Designed by Aga Chaińska, Graphic Design BA



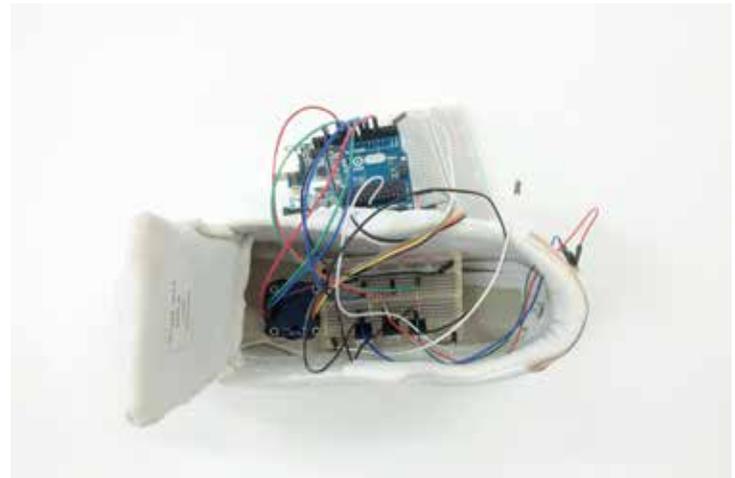




CHU (2016)

Chu is a game where your shoes are the controllers. Use your chu's to capture colours found in the environment around you. Step on the colours before your friends, or before the time runs out.

Project Designed by Amalie Skrede, Graphic Design BA

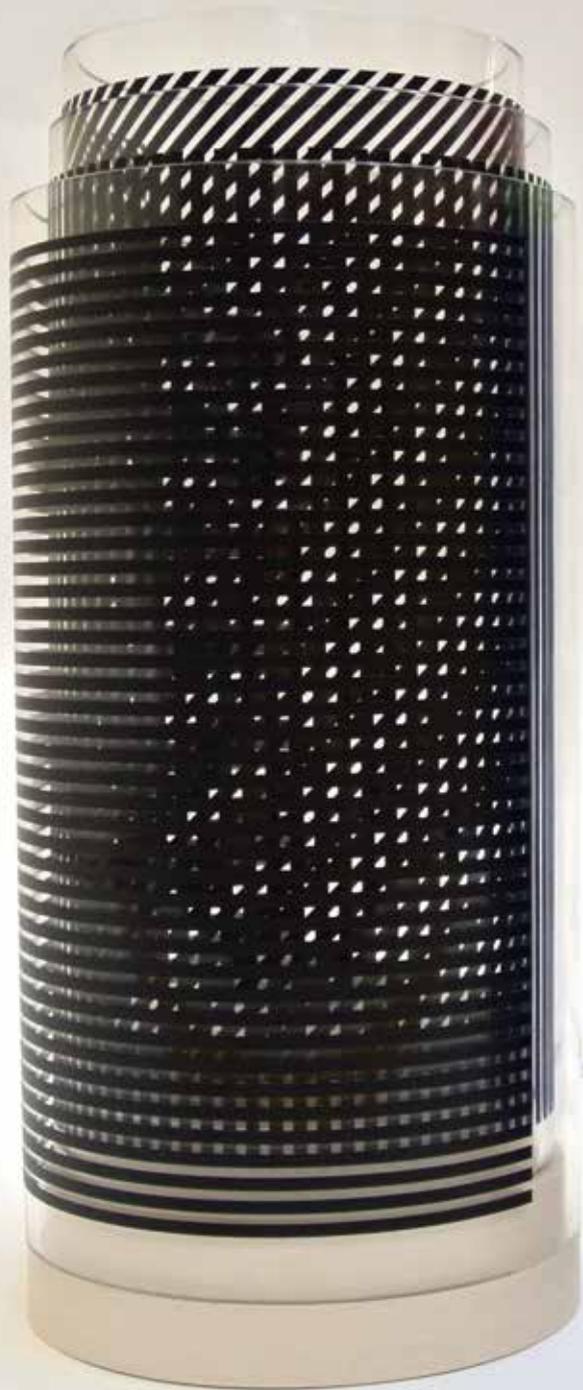


ILLUSION LIGHT (2016)

The Illusion Light enables the user to change the brightness of the light by moving the lamp. There are two sets of lights, one is made up of different lines, and the other uses different colours. When people move the lampshade the areas of lines and colour overlap, creating interesting lighting and shadows.

Project Designed by Hanyu Li, Product Design BA







WATERMARK LIGHTING (2016)

Watermark Lighting is a security lighting system for galleries and museums. Using an Arduino circuit as well as a high powered strobe light, images captured by a digital camera are distorted. This means artists work can be protected and they can control its presence online.

Project Designed by Drew Richards, Product Design & Engineering BSc



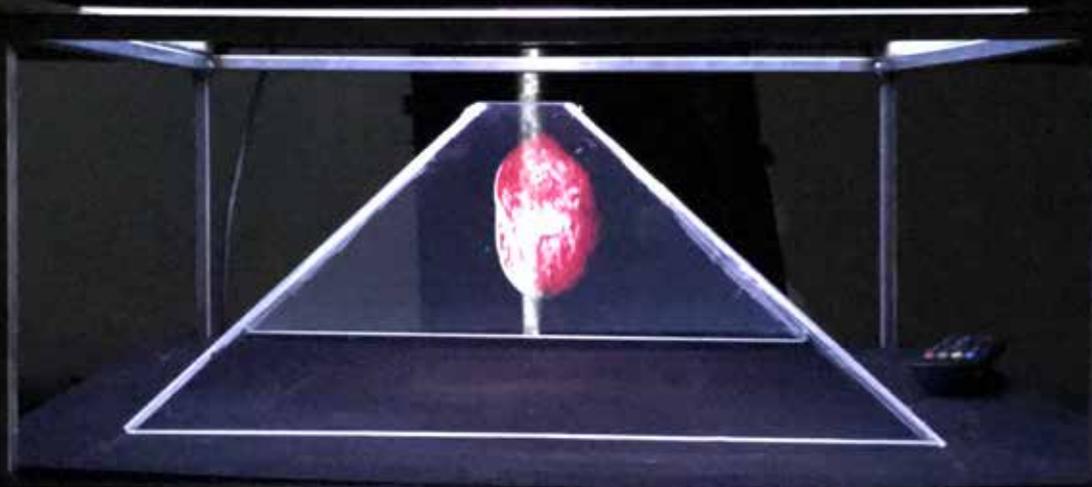
THE SMART UKE (2016)

The Smart Uke is an interactive ukulele providing an easy to learn experience for its players. Using an Arduino which is connected to an application via Bluetooth, allows the player triggers the ukulele through voice activation. This was a project to bring traditional and modern technology together, thus creating a product which develops an existing product.

Project Designed by Hannah Patrice Ledwith, Graduate Diploma Creative Practice





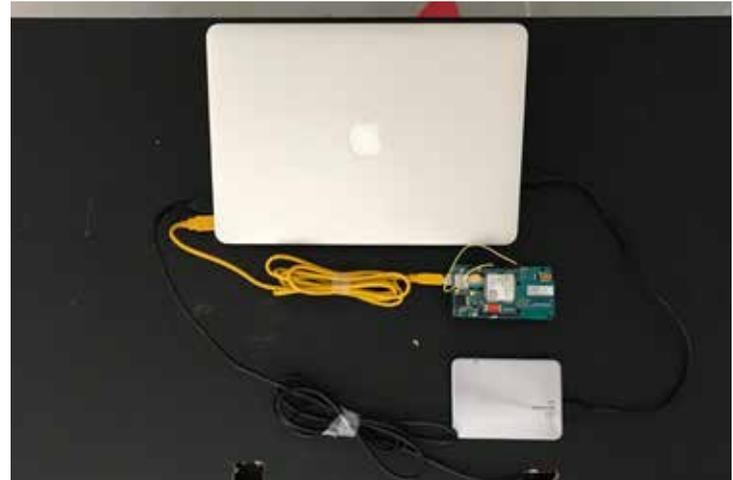
A glowing red heart-shaped object is suspended inside a pyramid-shaped display case. The case is illuminated from within, creating a bright white outline of the pyramid. The background is dark, and the overall scene is dimly lit.

Text: 07487571207

PHONE RADIATION (2017)

A hologram that has a user interaction build in. The hologram shows live data about the phone radiation in the room, this is done by allowing people to text the Arduino microcontroller which generates a visually through a morph. The hologram will change and expand by the number of text messages it receives.

Project Designed by Joe Atkin, Brayden Ward and Will Reuben, Graphic Design BA



CONSIDERATE CONVERSATION (2017)

A voice sensitive light that, if used correctly illustrates a well-balanced conversation. It enables two users to see their flow of conversation, where balance is aesthetically represented by a wave of lights matching the user's voice level, speed and volume. A verbal clash will deactivate the flow, resulting in an absence of light.

Project Designed by Flora Macleod, Graphic Design BA





MUSIC REACTIVE LIGHTS 'IN HIGH CONCENTRATION' (2017)

Lights designed as part of an installation. The four lights react to the snare, hats, bass and electronic sounds in the music by London based producers Chlorine. Reactive lights 'in high concentration' This sketch makes use of the minim library to convert the various sound files into a series of data values that fluctuate with the peaks and troughs of the sound waves.

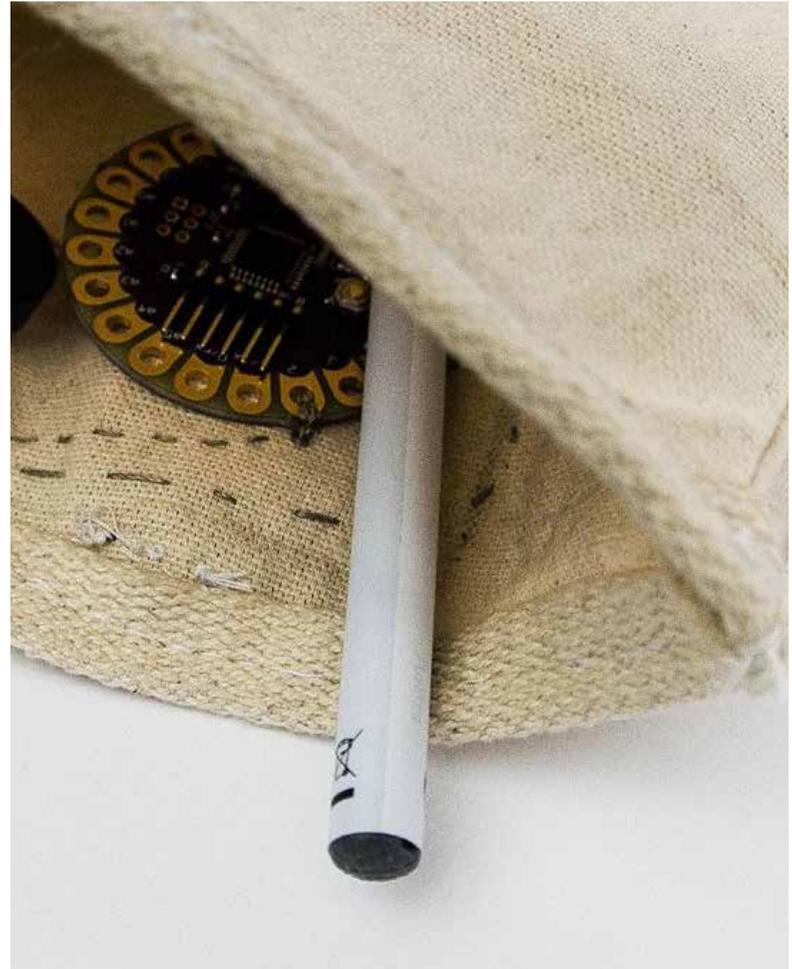
Project Designed by Flora Macleod, Graphic Design BA

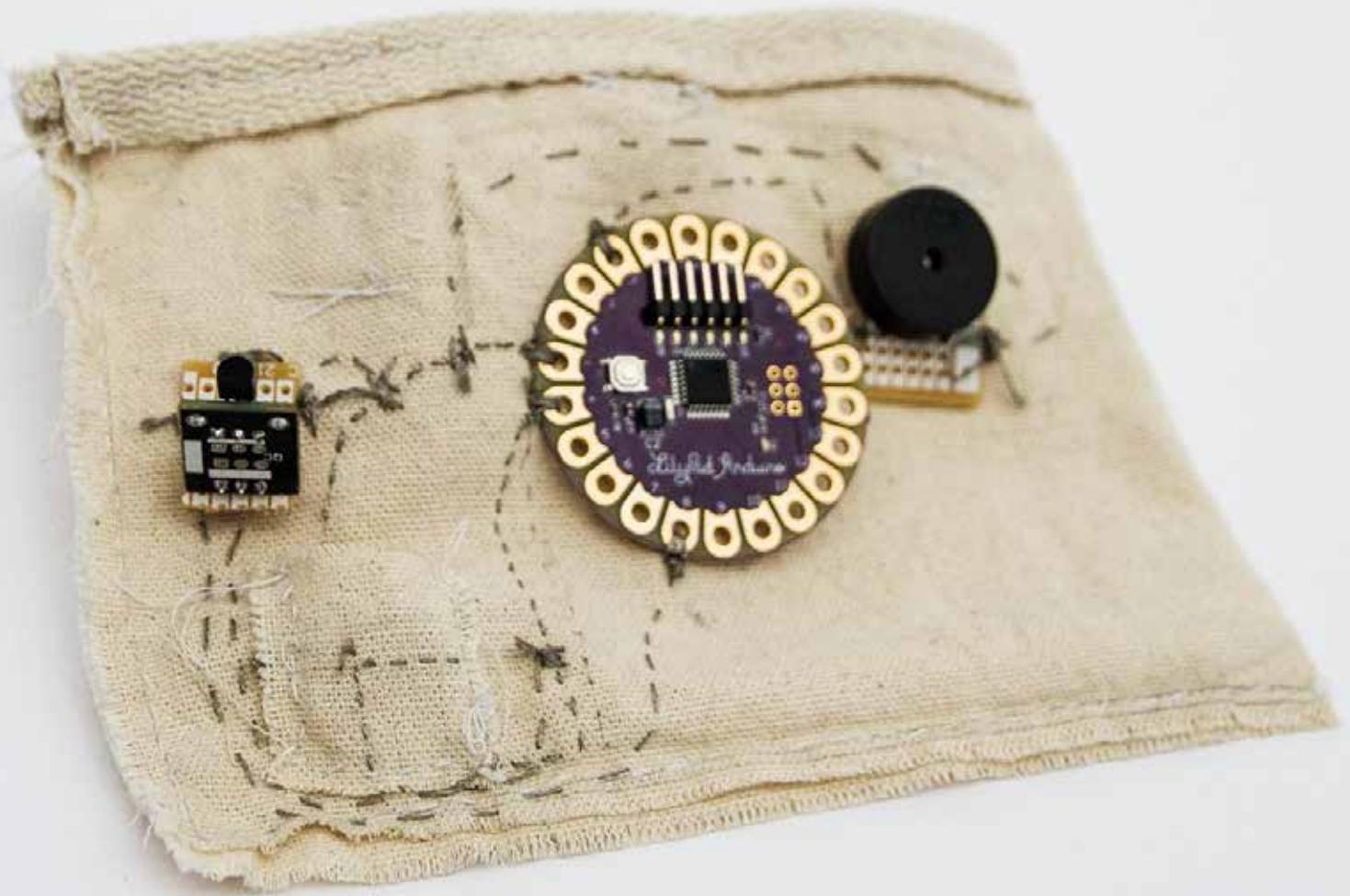


E-CIGARETTES ANTI EXPLOSION DEVICE (2017)

It was decided to design a device that would help to minimise potential burns and injuries caused by explosion incidents. As a final product, we came up with an e-cigarette pocket with a temperature sensor and a buzzer. Temperatures higher than 70 degrees trigger the sensor which activates the buzzer and therefore warns us about incoming explosion.

Project Designed by Kamila Szewczuk, Graphic Design BA







FIRE - VISUALISING AS MOTIVATIONAL TOOL (2017)

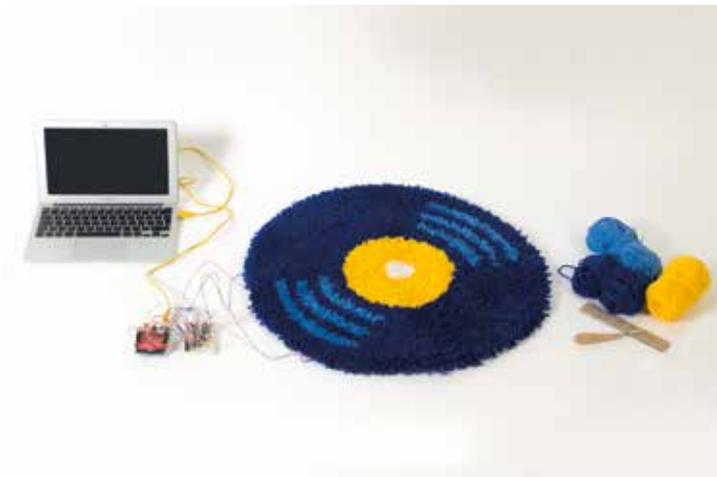
Electrodes were attached to the boxing gloves forming a circuit when in contact with the wire wool. When the connection is made, the wool ignites creating flames and sparks that spread along the surface of the material. The tests were done in very controlled conditions in a well ventilated area. The results were filmed and make for an impressive performance piece.

Project Designed by Jack Jenkins, Graphic Design BA



RECORD RUG (2017)

A traditionally hand-crafted rug combined with Arduino code. Programmed to scratch like a record, but with your feet instead. The record rug uses multiple pressure sensors that measure when someone places the weight of their foot on them. The pressure sensors trigger the sound file only when multiple adjacent pressure sensors are pressed within a certain time limit from each other. A sweeping motion on the rug creates the sound, just like a record scratch. Project Designed by Alice Dowdall, Graphic Design BA



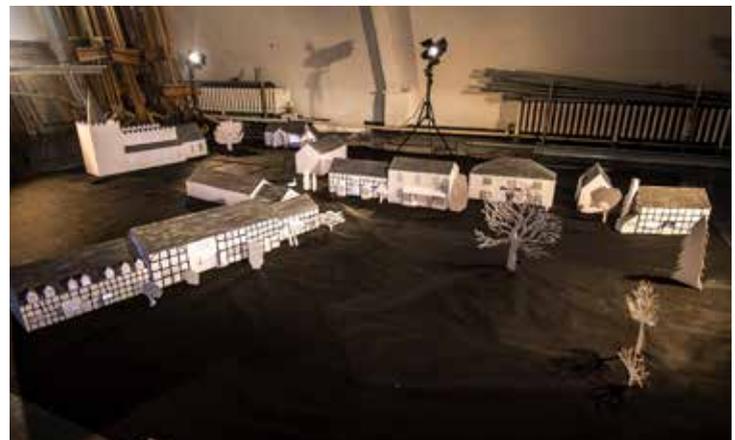




THE SURVIVAL OF RURAL COMMUNITIES (2017)

Laura's final major project for third year Illustration Animation was a documentary piece, based on the survival of rural communities. Focused on Dilwyn in Herefordshire and how it sustains a vibrant village atmosphere, having saved both the school and the pub from closure in recent years. The lights inside the buildings were LED strips, attached to an Arduino, which was then controlled by a smart phone via bluetooth.

Project Designed by Laura Brown, Illustration Animation BA



RAISE MY HANDS (2017)

It invites the viewer to stand in a space, and then using Arduino motion sensors, as the viewer raises their hands to the air, a fan activates a series of 16 inflatable arms to rise around them. The project is intended to spark inspiration in activism, and encourage the public to be the first to speak up about what is important to them in reality, rather than online.

Project Designed by Lottie Fox-Jones, Illustration Animation BA



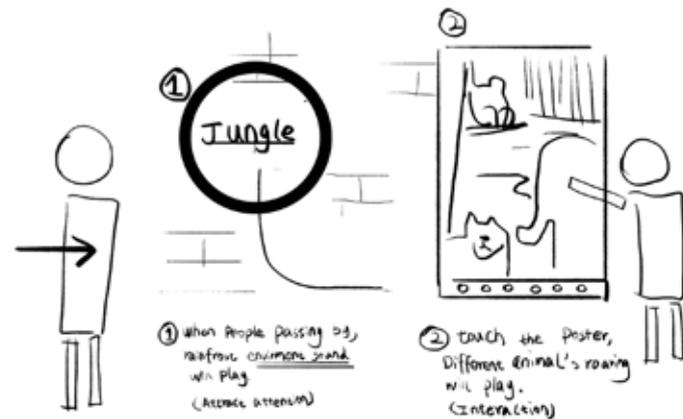




INTERACTIVE POSTER (2017)

As the starting point, Luo combined the research about braille and nature to create an interactive artwork, which also is dedicated for blind people. As they may not see the work they will be able to hear the sounds of the things they are touching on the artwork.

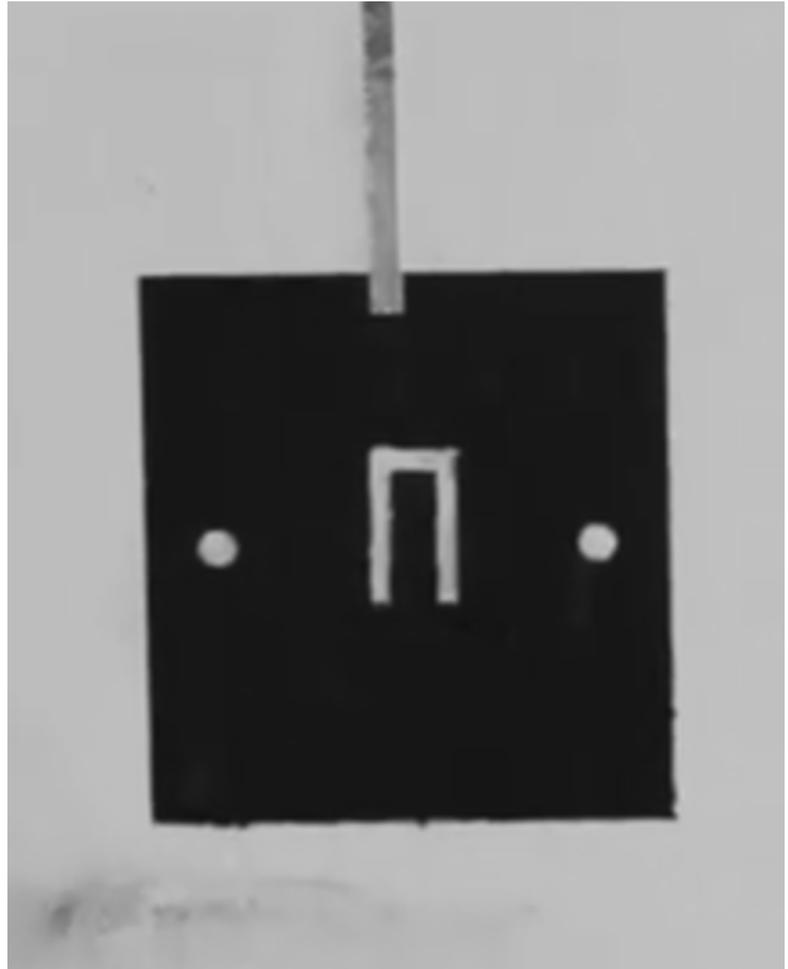
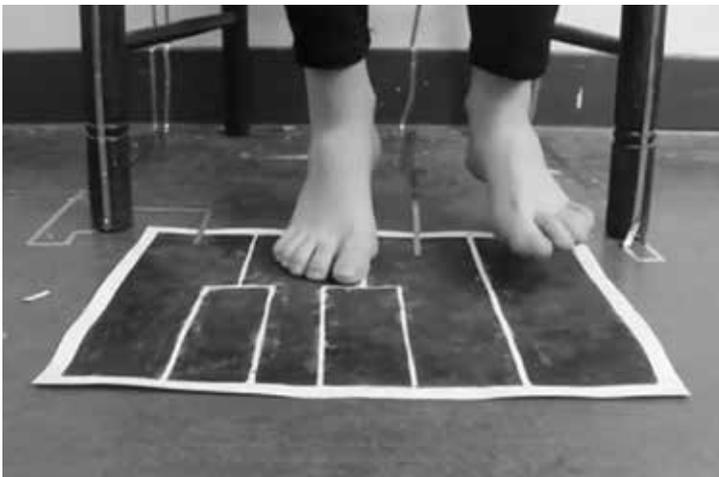
Project Designed by Luo Liangliang, Illustration Animation BA



MUSICAL CHAIR (2017)

Seating in a different position at a Musical Chair will produce different types of sounds. The project uses different types of conductive materials which are connected to a Touch Board. Charge sensing triggers the touch board to play a certain sound when a particular sound is played. Copper wire was found to be the best form of connecting material. It doesn't require soldering and it tends to create a reliable connection.

Project Designed by Georgia Dunmore and Emily Watson, Foundation







Educational Doll (2017)

The doll has a number of push buttons that are linked to an Arduino board via a series of wires. A Bluetooth module connects the doll to a nearby computer. The processing sketch listens for the values and triggers the VLC player to play certain video tracks. VLC was used rather than the inbuilt processing movie player files because the frame rate and the resolution of files can be much higher with independent quick time files. Project Designed by Georgia Dunmore, Foundation



VENDING MACHINE (2017)

It's a form of vending machine, which explores the increasing role of machines and technology in human interaction. I am endeavouring to create a machine which appears to assess human emotion, and provide an adequate response.

Project Designed by Lucie Iredale, Foundation



HOW WOULD YOU DESCRIBE THE FEELING OF SUNSHINE?

HOW WOULD YOU DESCRIBE GETTING A COMPLIMENT?

HOW DO YOU FEEL WHEN YOU ARE CAUGHT IN THE RAIN?

HOW WOULD YOU DESCRIBE THE FEELING OF A HUG?

HOW WOULD YOU DESCRIBE THE FEELING OF WAKING UP
IN THE MORNING?



START



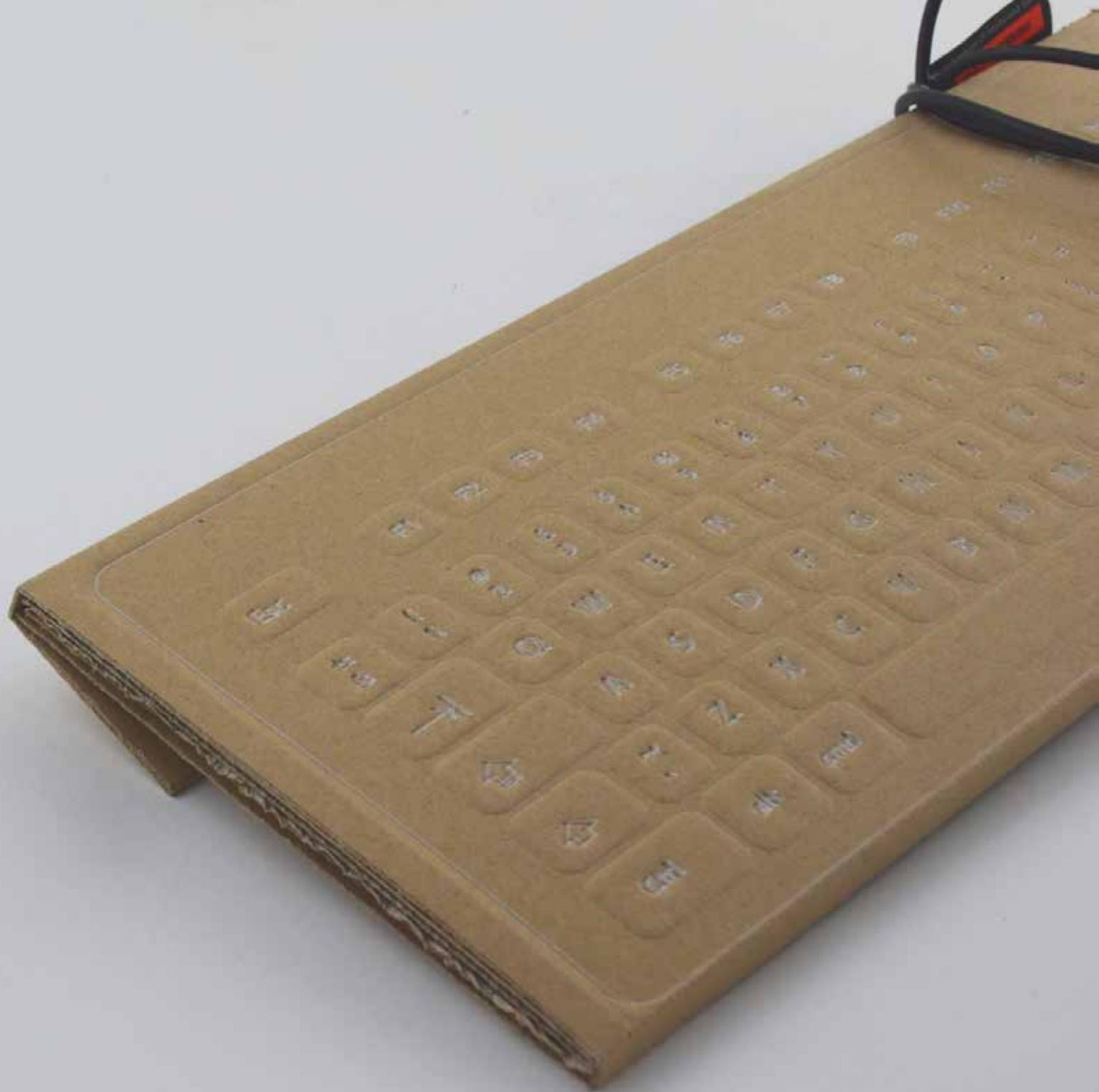
IT MAKES ME FEEL GOOD

IT MAKES ME FEEL FINE

IT MAKES ME FEEL NOTHING

IT MAKES ME FEEL WEIRD

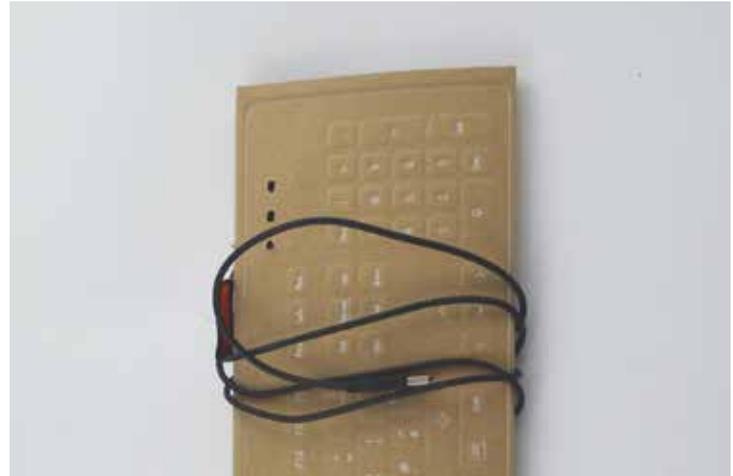
IT MAKES ME FEEL BAD



CARDBOARD KEYBOARD (2017)

What if you could make a keyboard out of a single sheet of cardboard? Instead of having dozens and dozens of keys, you could deboss them all onto a sheet of cardboard. This would mean no gaps in-between keys, making it easier to clean. Also this solution is very suitable as the keyboard would be fully recyclable.

Project Designed by Alex Lloyd-Jones, Product Design BA

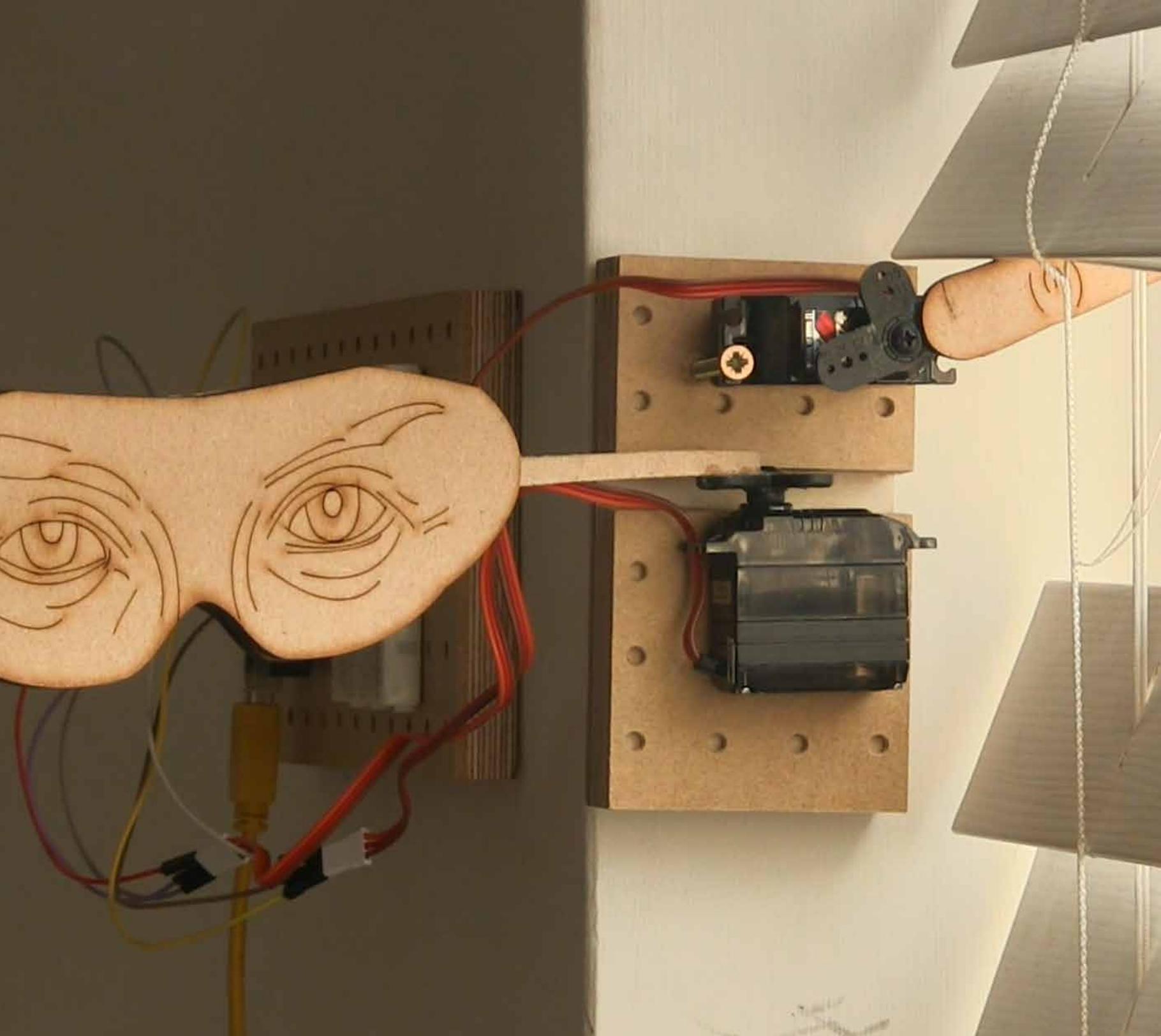


NOSEY NEIGHBOUR (2017)

The project gives an insight into my way of thinking, using my observations of human behaviour to narrate social change. The set of films focus on our most basic human instinct – to lie. They highlight how even with all this amazing new technology at our disposal we still use it to further our need to lie. The nosy neighbour project mimics the intricacies of human behaviour to deceive prospective burglars.

Project Designed by Dominic Postlethwaite, Product Design BA







CLIMBING LIGHT (2017)

Inspired by climbing equipment, the climbing light clips inside the extrusion which is fixed to the wall. The clip can be flipped so the light can be projected upwards for ambient lighting or downwards for task lighting. The copper tape conductor acts as a connector so light comes on when it is clipped in and can be positioned anywhere within the extrusion.

Project Designed by Grace Mitchell, Product Design BA



USELESS MACHINE (2017)

Design my own useless machines, using the process called chemical etching. This was part of my RCA project, in which I have delivered electronic and coding workshop to secondary schools and community. The aim for the workshops was to improve and expand students interest to design education.

Project Designed by Sebastian Kamil Oglecki, hackSpace Technician

