

PROJECT PLAN

by Pia Schwaak

WASTE SEPARATION

Creating a trash can that helps
to apply more care



- Problem - Aluminum in the packaging
 - The technical aggregates in the sorting systems can only recognize one material at a time. Therefore, the lid recycling process is usually lost.

- Goal - separate the aluminum
 - For this purpose, a trash can be developed, which detects the hidden aluminum by a sensor and then makes it aware by LED's and sound and animates to separate.

STRIKING IN THE DARK

Creating wearables that offer
more protection in the dark



- Problem - People are overlooked
 - Especially in the winter time, when it gets dark early, it is more common for people to be overlooked on the streets. There are a lot of ways to make yourself visible in the dark, but most of them are not considered as nice by many.

- Goal - Creating invisible wearables
 - For this purpose, wearables can be developed. But these wearables should not be recognizable at first glance. When a car or something similar approaches to a person, the wearables should begin to glow at a certain distance.

DRINK MORE!

Creating a bottle that
animates you to drink more



CONCEPT

- Often people forget about drinking. About 50% of Germans drink too little. No matter if a bottle is within reach or not. Often no memos help. Drinking too little brings many consequences, like headaches, dry skin and so on. It needs to be changed!

GOALS

- For this purpose bottle should be developed which draws attention to this problem. In a rhythm of 2 hours the bottle should attract attention. For this, the bottle should get arms, which are filled by a sensor with air and than start to wave. At the same time a suitable tone sounds.

AUDIENCE

- Everyone from young to old
 - Only 52% of 14 to 29-year-olds drink more than two liters a day
 - Only 44% of people over the age of 60 drink more than two liters a day

USED TECHNIQUES

- 3D-Printing - for the cup/bottle itself
- Soft Robotics - moving arms
- Electronics - sound and maybe LED's
- Laser Cutting - creating pattern

MAIN PROBLEMS

- Combining the different materials
- Covering the circuit
- Integrating a pump for the soft robotic part

