

Tessa van Abkoude

Double MSc in Industrial Design and Human Technology Interaction Eindhoven University of Technology

Portfolio LinkedIn

About

Fluent in code, electronics, and fabrication, I build custom PCBs, interactive soft materials, and finetune large language models. I create systems that fuse digital and physical interaction, turning abstract ideas into working experiences by gluing together scripts, sensors, circuits, and form. I move quickly from concept to experientiable prototype through iterative making, whether that means heat sealing fabrics with a laser cutter, tuning 3D printers for conductive flexible filament, or designing components in Fusion 360.

Whether it's building devices that let us physically feel the environmental cost of being online, designing soft robots that sigh and shift, or building custom LLMs to catch sloppy science, I design systems that ask us to feel, question, and reimagine our relationship with technology.

I prefer to collaborate across disciplines, and I share my work openly through my website, GitHub, demos, seminars, and hackathons.

Worked with:

BMW Munich

PSV

Philips

Bureau Moeilijke Dingen

Amolf Soft Robotic Matter

The prototype Factory

Shown at:

Robosoft 2025

Dutch Soft Robotics Conference 2024

Perspectives on scientific error conference 2024

Go Green Office 2023

DDW 2023

DDW 2020

Maker fair 2020

Recognition:

MT/Sprout 25 Under 25 (2021)

Curriculum Vitae

Skills

Interaction Design **Experience Prototyping Electronics & Programming** Presenting User research

Visualizing

Adobe Ai / Ps / Id / Pr

Figma Sketching Blender

Software

Python

JS + (HTML/CSS) Feb 2022 - Jul 2022

React

Full stack development

Hardware

Fusion 360

KiCad/ Eagle

Arduino

Lasercutting

3D printing

Soft materials

2020 - 2022 Co-founder of Fitit

A sustainable toy company co-founded with three friends. With the mission of making play creative, sustainable and accessible.

Experience

Jan 2021 - Aug 2025 Student assistent at Eindhoven University of Technology

- Developed a local RAG system with an LLM, deployed on a university server, for an educational chatbot supporting R programming and statistical interpretation at the IE&IS faculty.
- Student assistent for the course: aesthetics of interaction
- Assisting in research on developing automated <u>checks</u> for reporting standards, statistical inferences, and open science practices. Organized a hackathon.
- Thematic analysis on social support in grief for the HTI department
- Coaching bachelor students Industrial Design students in their professional development as a designer. Helping them to direct their learning through workshops and individual coaching.
- Drawing scenarios in Illustrator for a Philips research project about the personalization of breast pumps.

Bachelor graduation project at PSV

Graduation project on (contextual) data collection for professional athletes. Worked with the first female soccer team and the second male soccer team.

Sep 2021 - Jan 2022 Full stack interaction designer - internship at Bureau Moeilijke Dingen

A design studio that focuses on creating interactive and intelligent products. Main skills developed there are: (interactive) data visualization, hardware development, 3D modeling, interaction design, UX/UI design, design sprints, co-creation sessions.

Education

2022 - 2025 MSc Industrial Design at Eindhoven University of Technology

Focus on soft robotics and soft interfaces. Graduated with a 9.

2022 - 2025 MSc Human Technology Interaction at Eindhoven University of Technology

Focus on metascience and large language models. Graduated with a 9.

2021 Pre-master Human Technology Interaction at Eindhoven University of Technology

Followed courses on statistics, behavioural research methods, and decision making.

2018 - 2022 BSc Industrial Design at Eindhoven University of Technology

Followed the minor "New Product Development and Marketing" and extra courses (3) in Electrical Engineering. Graduated with an 8,5.

Volunteering

Orchestra committee <u>BJPO</u> at Brabantse Bond Muziekverenigingen Nov 2022 - Jul 2023

> Management of the project orchestra, responsible for branding, promotion and visual representation of the orchestra

2017 - 2023 Various at harmonie Pro Honore Et Virtute

Organizing concerts or fun activities for the orchestra.

Aug 2019 - Nov 2019 Volunteer at student team IGNITE

Building an interactive light installation for GLOW 2019 (Hypar).

Sep 2019 - Mrt 2020 Activities Coordinator at Stichting Move

Empowering children aged 11 to set up a social project within their community