Critical Making

Project outside of course scope

Critical Making

Do you also think of Sheldon Cooper from Big Bang Theory when you hear Autism & Computer Science in the same sentence?

But you know, that Sheldon is not a true representation of what being Neurodivergent means - and would like to change that story?

Do you want to learn how to use the tools in our makerspace?

Do you want to unleash your inner artist and have fun while learning?

Who are we?

Jenny-Margrethe Vej

Research Assistant & IT Project Manager

MSc in Computer Science

DEI / ASD / ADHD Expert & podcast host of the Danish podcast Diagnoseklubben

Fun Fact: Spend 1.5 years at law school & started at DIKU to prove that women belong here

Pernille Bjørn

Professor & Deputy Head of Department for Research

Winner of the DANWISE Prize 2023 & SCIENCE Dissemination Award 2021

Ellie Thrane Christiansen

Research Assistant

Specialized in User-centered Design & Accessibility

MSc in IT, Digital Design & Communication

Fun Fact: Wanted to become a furniture woodworker before starting a Master at ITU

Kellie Anne Dunn

PhD Fellow

Co-designer & builder of wearable e-textile costume for the Atari Women project

Former Lab Manager at University of Washington College of Engineering

Former Master Craft Artisan & Theatre Crafts Instructor at Washington School of Drama and Seattle University

Valeria Borsotti

PhD Fellow

Tech anthropologist

Member of BEVICA Universal Design Research Hub & DEI expert

Fun Fact: Used to be a professional fine arts printmaker

Morten Engell-Nørregård

Lab Manager at DIKU supporting research with practical aspects such as fabrication of physical artifacts or robotics parts

PhD in Computer Science

Former goldsmith journeyman & Design Consultant at Georg Jensen

What are we going to learn?

Learning Objectives

By the end of this project, the student will have

- Knowledge of
  - Theories on critical design
  - User centred design in makerspaces
- Skills to
  - Analyse the barriers of neurodivergent groups
  - Innovate through iterative prototyping and critical design in a makerspace
- Competences to
  - Analyse invisible barrier and 'taking-for-granted' assumptions in applying user centred design
  - Design critical artefacts challenging the 'taking-for-granted' assumptions
  - Innovate and push boundaries of Computer Science as a field

How are we going to learn?

- Inspired by GRACE – an interactive Origami installation & Application
    - Celebrated the 70th anniversary since the first computer bug was found
    - Combines history with making & technology

- Create design artefacts which challenge existing, stereotypical narratives in Computer Science, while manifesting counter-narratives using digital and analogue materials

- Interact & collaborate with advocacy groups such as the Autism Association & the Danish Society of Engineers (IDA)

What do we mean by 'Artefact'?

- Explore visualization of The Spoon Theory

- Or some visualization of Dyslexia?
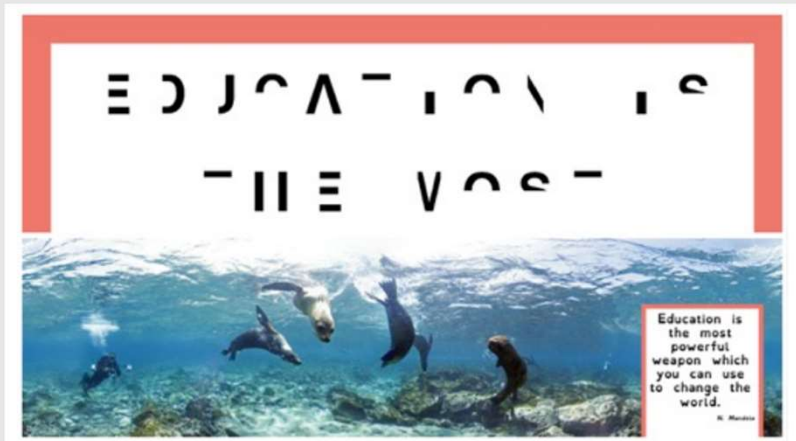
Figure 1 from "Fostering Cooperative Activism through Critical Design" by Menendez-Blanco et al

What do we mean by 'Artefact'?

Atari bug fighter game

http://www.atariwomen.org/game/

Atari Women 8-bit Heroine Costume
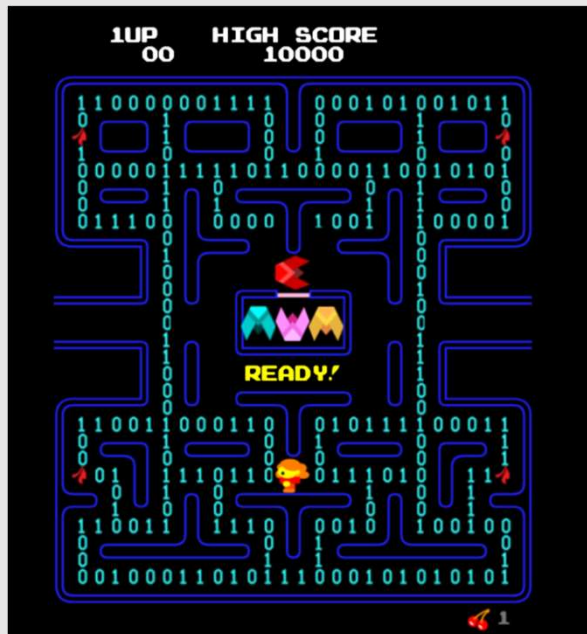
http://www.atariwomen.org/gallery/atari-women-8-bit-heroine-costume/

What do we mean by 'Artefact'?

DOREEN – A norm-critical story-telling game
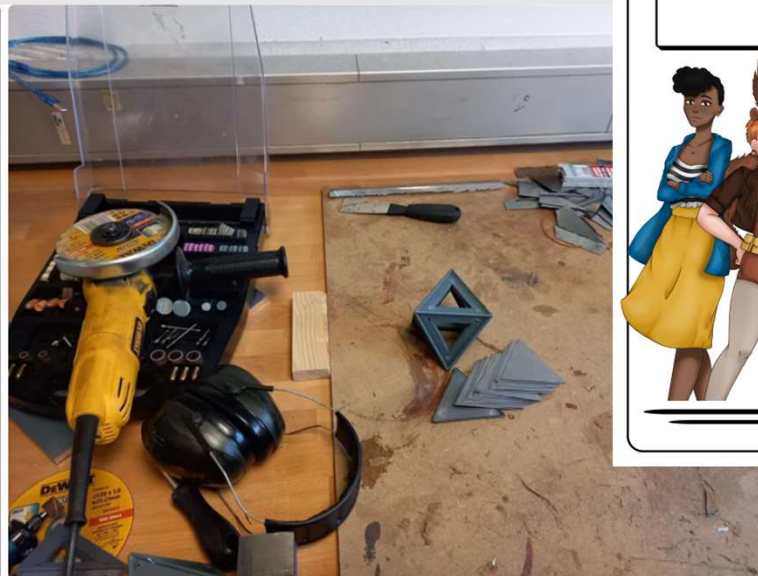
Practicalities

- Block 3 & 4
- Tuesdays between 14:15 and 16:30 here at Sigurdsgade or in our Makerspace

- First day: February 6
- Hand in report: June 11
- Exam: June 18 (TBC)

- 15 ECTS & lots of fun

- *The information shared today will be online on femtech.dk as soon as possible & can be send by email if you provide Jenny with your email address*

Application

- Deadline: November 1ˢᵗ by end of day

- Apply by email to: jvej@di.ku.dk (you will receive a confirmation within 24 hours)

- Things to add (please also see course description):
  - Are you applying as individual or group? (specify names and email addresses)
  - Master or Bachelor student?
  - Why do you want to participate & what awesome skills are you bringing with you?
  - What are your expectations for collaborating with fellow students?
  - What other courses will you be following in Block 3 & 4 & what are their schedules?
  - Are you able to participate in this project on Tuesdays from 14:15 to 16:30?
  - Are you interested in Roskilde Festival (NOT MANDATORY!)

Questions?