



Contact

Phone

+45 60 54 14 58

Email

Patrick.heen@gmail.com

City

Østerbro, Copenhagen

Expertise

- Product development
- CAD (SOLIDWORKS, Siemens NX and more)
- Figma
- Adobe Illustrator + InDesign
- 3D printing
- Python, Java, C++, Kotlin
- User research

Languages

Danish

English

Product development engineer

Patrick Heen

I am a product development engineer with an MSc in Design and Innovation from DTU, and I work best at the early end of a project, where the problem has not been framed yet and the fastest way forward is to build something and put it in front of someone. This is what my thesis came down to, since rather than assuming which method would stop a drone I built a test rig and ran 109 experiments in order to find out, and then validated the best of them against a drone in free flight.

Work experience

Dec. 2024 - Now

SAP - Copenhagen

Student worker - Customer engineer IXP



- Acted as Scrum Master for an internal UI project, streamlining the AS-IS workflow by eliminating 3 out of 10 steps, significantly improving user experience.
- Built an integration project connecting SAP Analytics Cloud, Datasphere and Digital Manufacturing, working with production data flowing across all three platforms.
- Provided technical support and troubleshooting across 20+ live corporate events, demonstrating strong cross functional communication and reliability.

Aug. 2023 - Jan 2024

The LEGO group (Creative Play Lab) - Billund

Design intern CPL



- Developed an original play concept that was selected for further development out of 41 competing pitches, ranking #1 among concepts from 7 other design interns.
- Built and iterated 15+ physical prototypes, focusing on structural stability, building challenge, and adherence to the LEGO System in Play.
- Participated toy testing sessions, observing play patterns and directly translating user behavior into refined prototype iterations.

Mar. 2022 - Aug. 2023

Frederikssund Gymnasium

Student worker - TA



- Designed and built 10+ original physical creations, authoring highly visual, step-by-step building tutorials to guide high school students through the assembly process.
- Managed the rapid prototyping lab, instructing users on 3D printing, laser cutting, and physical assembly to bring their ideas to life.

Feb. 2021 - Aug. 2022

DTU - Ballerup

TA - Material science



- Helping students select materials, make calculations, and complete tasks, using Granta EduPack and principles of material science through three semesters.
- Assisting Students in laboratory settings with investigating samples and explaining theory.

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Extra activities

- Teaching assistant - Material science
- Tutor for new students
- Green challenge - third place
- DSE fair assistant
- Roskilde festival - project
- Student council
- Open house at DTU x2

Education

Sep. 2024 - Jul. 2026

Technical University of Denmark



Desing and Innovation MSc

- Master's thesis, graded 12: ran 109 experiments against a spinning propeller in order to determine the most effective non-destructive method of stopping a drone, and validated the results against a drone in free flight.
- Weighted average 10.9 on the Danish 7-step scale. Focus on user-centred design, robust mechanisms, prototyping with electronics and CAD, and sustainability.

Aug. 2020 - May. 2024

Technical University of Denmark



Proces & innovation BeNG

- Bachelor's thesis, graded 12: Implementing a Radical Innovation Framework at GEA, an interview study of why radical ideas stall inside a large manufacturer.
- Weighted average 9.3, including a 30 ECTS industrial placement at the LEGO Group. Focus on interdisciplinary engineering across design, physical computing, economics and statistics.

Tool Kit

- Computer-aided design: Siemens NX, PTC Creo, Fusion 360, 3ds Max, Rhino, and SOLIDWORKS.
- Physical craft: SLA/FDM 3D printing, laser cutting, milling and turning, and physical computing with Arduino and ESP32.
- Design Methodologies: Testing/User Observation, Double-Diamond Process, Concept Selection Matrices, Agile/Scrum, and much more.
- Digital design tools: Figma, Illustrator, and InDesign
- Programming: Python, Java, C++, Kotlin, JavaScript

Organisations I have worked with

During my work experience and DTU projects, I have worked with and delivered value to the following companies and institutions:

