Frederik Pedersen

Software Engineering Student, Aarhus University

frederik@mosekjaer.com +45 21 87 00 11 Aarhus, Denmark
linkedin.com/in/mosekjaer github.com/Mosekjaer mosekjaer.com



EXPERIENCE

Co-founder and Software Engineer · FlowDule — Feb 2026 - present

Aarhus, Denmark · flowdule.com

- Build two products from scratch: FlowDule, booking and payments for clinics, and Knotdock (knotdock.com), a website builder and CMS with ready-made designs.
- Own architecture and operation. Build APIs in C# and .NET with PostgreSQL, and React interfaces.

Software Consultant · FMP Software ApS (own company) — Oct 2025 - present

Aarhus, Denmark

- Deliver web apps, booking systems and WordPress plugins in Remix and PostgreSQL for small businesses.
- Built small AI tools that sort and process business data.

Software Developer · Nolek A/S — Nov 2022 - Apr 2025

Kolding, Denmark · Part-time, 8 to 15 hours per week, alongside studies

- Developed C# desktop tools (WPF, Blazor) and web tools (ASP.NET MVC) to collect, log and display machine test data with SQL, InfluxDB and Kafka.
- Programmed PC software that communicates with PLCs over serial, Ethernet and Modbus, plus RS485 links.
- Helped build mosCura Guide from scratch, a pick-by-light system that guides assembly workers step by step and stores every step for traceability, and wrote its C++ drivers.
- Programmed microcontrollers in C and C++.

Educator and IT Consultant · PsykoVision — Nov 2021 - present

Denmark · Part-time

- Present talks to healthcare workers, care home staff and other organisations.
- Teach on the national training course for voice hearer counsellors together with Jørn Eriksen.
- Run the website and the ticketing system for an annual international congress.

PROJECTS

PrepMeUp · Aarhus University — Autumn 2026

Group project, 4th semester, ongoing · github.com/Mosekjaer/prepmeup

- Build an emergency supply subscription with an ASP.NET Core API, Expo app and React admin panel.
- Set up CI in GitHub Actions that only deploys to a self-hosted server after a green build and test run, and added JWT validation against Keycloak in the API.

Ready Player Pi · Aarhus University — Spring 2026

Group project, 3rd semester, grade 12 · C++ on Raspberry Pi

- Built NotePi, one of two games in a multiplayer system over TCP: an ALSA microphone driver, an FFT and FIR filter pipeline that detects musical notes, the server game loop and the Qt screens.

EDUCATION

Bachelor of Engineering, Software Technology · Aarhus University — Feb 2025 - Jul 2028

Aarhus, Denmark · Expected graduation July 2028

- Grade average 10.1 on the Danish 7-point scale (max 12) after three semesters.
- Chosen electives: Satellite Communication, Big Data Analysis and Visualization (ground stations, satellite data, dashboards), Machine Learning (10 ECTS, neural networks and large language models) and Web Architecture and Orchestration (microservices, Docker, Kubernetes).
- Relevant coursework: Communication Networks and Network Programming, Digital Signal Processing. Current: Software Design, Software Test, Back-end Development and Databases.

AP Degree, Computer Science · UCL University College — Aug 2021 - Jan 2024

Odense, Denmark

- Top grade (12) in the elective Embedded Systems and Microservices and in the internship at Nolek.

LEADERSHIP AND ACTIVITIES

Student Representative · Degree Programme Committee, Software Technology — Aug 2025 - present

Aarhus University, Aarhus, Denmark

- Represent students in discussions on teaching, course evaluations and the curriculum.

Student Representative · Education Council and Campus Council — Aug 2021 - Jan 2024

UCL University College, Odense, Denmark

SKILLS AND INTERESTS

Programming	C#, .NET, C++, C, Python, TypeScript, SQL
Backend and data	REST APIs in ASP.NET, PostgreSQL, InfluxDB (time series), Kafka (data streams), SQL
Cloud, DevOps	AWS, Firebase, Supabase, Vercel, Docker
Frontend and mobile	React, React Native and Expo, Remix, Astro, .NET MAUI, dashboards for machine data
Networks	Network programming, Ethernet, serial communication, Modbus, RS485
Embedded and Linux	Microcontrollers, PLC integration, POSIX threads and inter-process communication on Linux
Methods	Scrum, Git, continuous integration and deployment, testing with NUnit, NSubstitute and Playwright, modelling in UML, C4 and SysML
Certificates	Scrum Course, Systematic A/S (2026)
Languages	Danish (native), English (fluent)
Interests	Getting people together (a wine half-marathon with friends, game nights at the university Friday bar), running, strength training, food, wine and film clubs