

ANDREAS HOLMSEN

EDUCATION

UNICAMP — Engenharia de Computação (BEng eq.) Specialization in Computer Systems

UPCOMING

Planned Double Degree with INSA Toulouse, 2027-2028

INSA Toulouse — Diplôme d'Ingénieur (MSc eq.) Computer and Networks Engineering

2022-2026

Ranked in the top 17% (2023 & 2025)

Software Engineering, Systems, Cyber Security & Networks, AI & Machine Learning, Embedded systems, Electronics & Signals

KAIST — Exchange Semester School of Computing

2024

EXPERIENCE

Sopra Steria, Oslo

UPCOMING

Technician - Summer Intern

Upcoming 8-week internship focused on network observability, infrastructure insights, and consulting. Contributing to the development of a centralized insights platform integrating data from NetBox, Zabbix, and ServiceNow through API integrations and visualization tools. Working in a team to model and visualize network health, capacity, uptime, and SLA-related metrics for real-world enterprise infrastructure environments.

Association of Norwegian Students Abroad (ANSA)

2024 - 2025

Digital Student Ambassador

Media production to promote studies abroad for Norwegian students. Adobe Suite for graphics design and video editing

PROJECTS

Custom Compiler for FPGA-based RISC-V Processor

2026

Lex, Bison, C, Vivado, VHDL, RISC-V, FPGA

Built a compiler in C using Lex/Bison targeting a self-programmed RISC-V microcontroller on FPGA, combining compiler construction, ISA design, and hardware/software co-design.

Decentralized Chat System

2026

Java, SQLite, Maven, Jira, Git

Java chat system built from scratch with decentralized architecture; uses UDP for peer discovery, TCP for messaging, and SQLite for message storage; managed collaboratively with Git and Jira

Signal Processing Laser Game

2025

C, ASM (ARM), MATLAB, Simulink

Laser pistol game at multiple frequencies; simulation in MATLAB/Simulink; Fourier transforms, reactive audio and scoring implemented in Assembly & C

MICTCP - Custom TCP Protocol

2025

C, GDB, Git

Custom stop & wait TCP protocol with variable loss tolerance for video streaming

Autonomous Sailboat Embedded System

2025

STM32, C, Git

Embedded system sailboat using an STM32 microcontroller; reads wind direction via a weather vane to adjust sails, and a controller using a USART for motor control via PWM to change direction



CONTACT

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PROGRAMMING

System-level

**ASM (x86, ARM, RISC-V),
C, Rust, VHDL (FPGA)**

Applications & OOP

Java, Python

Web Development

**HTML, Tailwind CSS,
JavaScript**

Other

SQLite, OCaml, Ada

DEVELOPMENT TOOLS

Git (GitHub, GitLab)

Jira, GitLab Issues

GDB

Wireshark, Nmap

Maven, npm

VSCoDe, Keil, Vivado

LANGUAGES

Norwegian - Native (C2)

English - Fluent (C1)

French - Proficient (B2)