

Thomas Helboe Poulsen

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EDUCATION

Technical University of Denmark (DTU)

MSc Computer Science and Engineering

2026 - Present

BSc Software Technology

2023 - 2026

- GPA equivalent: >11/12
- Relevant coursework: Algorithms & Data Structures, Databases, Software Engineering, Computer Science Modelling, Coordination in Distributed Systems
- Summer exchange at Nanyang Technological University (NTU), Singapore (2025)

EXPERIENCE

Student Developer - cBrain, Copenhagen

2024 - Present

- Implemented product features and maintenance improvements in a large C# enterprise codebase, including UI changes, dependency cleanup, and bug fixes
- Worked in an agile team on production enterprise software with existing architectural constraints

Student Assistant (Analyst, Data Eng.) - [BBR](#)

2022 - 2024

- (Danish national property registry with change history for buildings, parcels and units.)
- Automated frequent Excel and SQL extraction workflows using Python, PostgreSQL and REST APIs from Datafordeler.dk
 - Built reproducible PostgreSQL tooling for recurring data analysis, with structured logging, validation checks, and clearer point-in-time query semantics

Teaching Assistant - *Algorithms and Data Structures 1*

Spring 2026

PROJECTS

Bachelor Project - Automata Algorithm Module

2026

- Extended a teaching tool with automata theory environments for $\text{regex} \rightarrow \epsilon\text{-NFA} \rightarrow \text{NFA} \rightarrow \text{DFA}$ transformations
- Delivered course-ready implementation package expected to be used in the next course cycle; automata format, validation and visualization conventions were also adopted by a concurrent project

Developer - Mosen (volunteer-run event beverage system)

2025 - present

- Added transaction handling and validation around purchase writes in an offline Python/Dash + SQLite system used on student cabin trips, preventing failed purchases from leaving partial database changes
- Reworked self-service purchase errors to make failed transactions immediately visible and reduce the risk of unaccounted purchases; also improved guest and settlement handling

Developer - [ICOptimize](#) (DTU course collaboration)

2025

- Built a Rails desktop app around a proprietary optimization algorithm, integrating a Go backend with frontend controls and Python/MATLAB calls
- Simplified deployment to a single binary by rewriting Python layer and embedding files

HONORS & LEADERSHIP

- 3rd Place (2022); Volunteer - Unge Forskere (Danish Science Comp.) 2023 - 2026
- Vector, DTU - Student mentor, event planner, sponsorship outreach 2024 - 2025
- KABS - Recruitment and coordination of vectors for DTU study start 2026

TECHNICAL SKILLS

- **Primary:** C#, Python, SQL
- **Project experience:** PostgreSQL, SQLite, Pandas, Git, Go, Rust, Excel automation, Java