

SEBASTIAN GLOERFELT-TARP

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EDUCATION

Technical University of Denmark (DTU), Kgs. Lyngby, Denmark

MSc in Computer Science and Engineering

Expected Graduation: Summer 2028

BSc in Software Technology, thesis graded 12/12 (highest grade on the Danish scale)

Graduated: June 2026

Relevant Coursework: Algorithms & Data Structures I–II, Algorithms for Massive Datasets, Distributed Systems, Computer Systems, Database Systems, Mathematical Statistics, Functional Programming.

Dartmouth College, Hanover, NH, USA

Fall 2025

Exchange Semester: Applied Machine Learning, Operating Systems, The Price System (Economics).

EXPERIENCE

Söderberg & Partners

Copenhagen, Denmark

Quantitative Analyst

March 2026 – Present

- Build revenue and performance analytics in Python, SQL, and Excel that serve 13 teams totalling 200+ employees across the Danish business.
- Design segmentations of earnings data that isolate revenue drivers and track team-level progress; key insights are reported at group level and inform decisions across roughly 5,000 employees.
- Own the full workflow with a high degree of responsibility, from extracting and cleaning large production datasets to the final reporting used by department and group management.

RD8

Copenhagen, Denmark

Junior Engineer / Developer

November 2024 – February 2026

- Researched leading generative AI approaches in computer-aided design and presented findings to senior staff, guiding RD8's strategic direction in machine learning and AI.
- Developed onboarding material on algorithmic thinking and Python programming for new hires.

RESEARCH & PROJECTS

Bachelor Thesis: Compact Data Structures for Set Collections (*C, Python*) github.com/sebgt11/Bachelor

- Independent research: designed and implemented compressed bitvector data structures in C that exploit set containment, storing each set in a hierarchy relative to its parent with rank, select, and access queries.
- Reduced per-set space on nested collections by 75% on average against an entropy-compressed baseline, or by 47% with hierarchy contraction enabled, where retrieve and rank queries average about one microsecond.
- Built the full experimental pipeline, from synthetic data generation and benchmarking in C to statistical analysis in Python (NumPy, Matplotlib), and verified correctness on all 160 benchmark configurations.

Hex Game AI (*Java*)

Summer 2025

- Developed a multithreaded AI agent for the board game Hex, combining Monte Carlo Tree Search with Dijkstra-based board evaluation to guide simulations toward the strongest candidate moves.
- Engineered a fast simulation engine with efficient move validation, a performant game loop, and dynamic heuristic tracking to support large-scale rollouts, with board state separated from game logic.

FlixMe.live (*Next.js, React, TypeScript*)

Spring 2025

- Built and deployed a full-stack movie discovery platform with secure API routing, debounced search, and optimized data fetching, live on Vercel with CI/CD.

LEADERSHIP & ACTIVITIES

Lead Treasurer, DTU Padel Club

2024 – Present

- Manage budgeting, financial planning, and expenditures for a rapidly growing student sports organisation.

SKILLS & INTERESTS

Programming & Tools

Python (Pandas, NumPy, Matplotlib), Java, C, SQL, JavaScript, Git

Quantitative

Algorithm Design, Statistical Analysis, Performance Benchmarking

Machine Learning

Applied ML, Model Training & Evaluation, MCTS, LLMs & Generative AI

Languages

Danish (Native), English (Fluent)

Interests

Distributed Systems, AI Systems, Algorithm Design