

Andreas Bogossian

Machine Learning · Software

M.Sc. student at Aalto University specialising in machine learning and mathematics. I build systems at the intersection of math and production-quality software.

GitHub · LinkedIn · andreasbogossian.com

Education

Master of Science — Machine Learning, Data Science and Artificial Intelligence

Aalto University · 2025–2027

Bachelor of Science — Computer Science

Aalto University · Sep 2023–Jan 2026

Minor in Mathematics

Relevant coursework: Machine Learning, Bayesian Data Analysis, Reinforcement Learning, Stochastic Processes, Prediction and Time Series Analysis, Introduction to Optimization, Numerical Analysis, Linear Algebra, Programming Parallel Computers, Databases, Theory of Computation, Software Engineering

Skills

Category	Technologies
Languages	Python, R, TypeScript, Scala, C
ML / Data	scikit-learn, PyTorch, pandas, NumPy, brms, ggplot2
Web & Backend	React, Next.js, Bun, PostgreSQL
Infrastructure	Docker, Kubernetes, Terraform, Google Cloud, Flux CD
Tools	Git, Ubuntu, Quarto

Publications

Knowledge Graph Enhanced Recommender Systems

Aalto University · Sep 2025 · Graded 5/5 (Excellent)

Bachelor's thesis comparing traditional recommendation algorithms with knowledge graph-based approaches (graph neural networks and knowledge graph embeddings), analysing the strengths and weaknesses and optimal use cases for each method.

Read thesis

Projects

Activity Challenge Telegram Bot · Dec 2025–Jan 2026

Production Telegram bot running guild-based fitness competitions across Aalto university societies. Features a point system based on the 2024 Physical Activity Compendium, multi-step conversation flows for activity logging, a React/Vite analytics dashboard, and full IaC deployment on Kubernetes (Talos OS) with Terraform and Flux CD.

GitHub

Hierarchical Bayesian Analysis of Aviation Safety

Investigated fatality rate patterns across aircraft manufacturers using hierarchical Bayesian models in R with brms. Partial pooling models revealed persistent manufacturer-level safety differences despite industry standardisation.

GitHub

iPhone Premium Analysis: Hardware vs. Price

Regression study assessing whether Apple devices are priced above hardware-justified levels. Tested linear regression, decision trees, random forests and neural networks in Python. The report concludes that all Apple models are priced above predicted hardware value.

GitHub

Experience

Full Stack Developer · Droppe (*Internship, part-time*)

Sep 2024–May 2025 · Helsinki, Finland

- Optimised data pipeline with caching, reducing query costs by 37×
- Designed a customised analytics schema to surface relevant data for developers
- Built a no-code filtering tool for data visualisation

Logistics Assistant · Viking Line (*Seasonal*)

Jun 2024–Aug 2024 · Finland

- Served customers across three ships in English, Swedish and Finnish

Honors & Awards

Accenture Software Quality Award – Finalist

Accenture · May 2025

Top 3 of 19 teams at Aalto University, recognized for software implementation quality.

Volunteering

Board Member · Aalto Triathlon Club · Sep 2024–Present

Sports Committee Board Member · Tietokilta · Jan 2025–Present

Languages

Language	Proficiency
English	Native or bilingual
Finnish	Native or bilingual
Swedish	Limited working
Chinese (Mandarin)	Elementary