

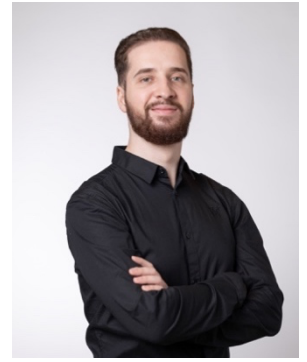
Interests:

Automated Reasoning, Program Verification, Model Checking, Computer Vision, High-Performance Parallel Computing, Compilers, LLVM, ML, PyTorch, C/C++, Rust, Rocq, Lean

Arbenit Kamberi

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Check out my website instead!
arbenitkamberi.github.io



Education

ETH Zurich | Currently

Master's in Computer Science | Sep 25 – Current

Major: Secure and Reliable Systems

Focus put on Formal Methods, Program Verification and Automated Reasoning, with High-Performance Parallel Computing alongside.

Minor: Computer Vision

Student Teaching Assistant for the Visual Computing course at ETH Zurich.

Project: Optimizing GenMC's consistency checker

Bachelor's in Computer Science | Sep 22 – Aug 25

Thesis: A Rust Frontend for GenMC – Enables model checking of Rust programs through their compiled LLVM-IR code.

Further Student activities: ETH Cybergroup, Shoqata Studenti

Passerelle

AKAD College | Aug 21 – Aug 22

General further education for entering ETH Zurich.

Federal Diploma of Vocational Education and Training in Software Engineering (EFZ, Apprentice) + Federal Vocational Baccalaureate in Economics (KV BMS)

UBS AG | Bildungszentrum Zürichsee | Aug 16 – Jul 20

Best graduate of my year at UBS AG

Experience

VERSE Lab, NUS

Research internship – LTL model checking

Singapore

Jul 26 – Current

KNOW Center Research GmbH

Research internship – Computer Vision for industrial defect detection

Graz

May 26 – Jul 26

- Redesigned a video-analysis pipeline for classifying anomalous elongated structures, replacing rigid filter/rescue logic with independent per-class geometric passes.
- Built the perception on SAM 3.1 video segmentation model, with custom amodal shape completion for occluded masks and hardened skeletonization and curvature estimation.
- Combined per-pass debug render grid of every pass's intermediate geometry.

UBS AG

IT Project Manager

Zurich

Dec 21 – Sep 22

- Head of a project team within Wealth Management Research and SPoC.
- Management and implementation of releases, end-of-life dismantling, technical migrations, and full rollout of a new internal platform for market research publications.

- All migrations were carried out successfully and on time. This was achieved through early planning that took other requirements into account and continuous consultation with the central planning departments for the company-wide migrations.

Software Engineer

Aug 20 – Dec 21

- Rollout of an internal beta version of a new platform for exploring market research publications with a search feature and user preference settings.
- Implementation of anonymous user tracking such as time spent on a publication or search queries to measure the popularity of various topics.
- Integration of the new frontend with the existing data management platform.

Software Engineer in training (EFZ, Apprenticeship)

Aug 16 – Jul 20

- First year of general training, followed by three years at Wealth Management Research.
- Databases (Oracle, Postgres), server backend (Java, Spring Boot), and frontend (React, Freemarker) development.
- Development of internal platforms for the publication and management of market analyses. Large datasets, many content types and jurisdiction-aware publications.
- Integrated the publication pipeline with downstream platforms that consume this data.

Further Certificates

Professional Scrum Master 1 (PSM 1, Scrum.org)

Certificate-ID: 619292

Certificate in Advanced English (CAE, Cambridge University)

Certificate-ID: 19ACH0086527

References

Prof. Dr. Michalis Kokologiannakis | michalis.kokologiannakis@inf.ethz.ch

Mentor and advisor for my projects at ETH; Head of the ARV Lab at ETH.

Prof. Dr. Ilya Sergey | ilya@nus.edu.sg

Advisor for my project at NUS; Head of the VERSE Lab at NUS.

Jörg Simon | jsimon@know-center.at

Advisor for my project at KNOW Center Research; Project Head at KNOW.