

Viktor Gsteiger

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PERSONAL DATA

- Date of Birth: 29.06.1998
- Place of Birth: Bern, Switzerland
- Citizenship: Swiss, Slovak
- Languages: German (Native), English (Professional), French (Elementary)

EDUCATION

ETH Zürich

M.Sc. in Computer Science (GPA 5.46)

Major in Data Management Systems

Zürich, Switzerland

Sep 2021 – April 2024 (Expected)

University of Basel

B.Sc. in Computer Science (GPA 5.7)

Basel, Switzerland

Sep 2018 – July 2021

WORK EXPERIENCE

ETH Zürich

Research Assistant

Zürich, Switzerland

Oct 2023 – Nov 2023

- Support the Distributed Systems Laboratory in the development of the MODYN platform. Rewriting latency critical parts of the platform in C and C++.

Palantir Technologies

Forward Deployed Software Engineer

London, United Kingdom

Jul 2023 – Sep 2023

- Implement custom data visualization, analysis workflows, action applications, and user interfaces on the proprietary Palantir Foundry stack.

Business Systems Integrations AG

Software Engineering and DevOps Working Student

Zürich, Switzerland

Jan 2022 – Jun 2023

- *DevOps Engineer* (Sep 2022 – Jun 2023): Responsible for designing, implementing, and maintaining complex infrastructure systems. This includes using technologies such as Kubernetes, Helm charts, Artifactory, GitLab, Ceph storage, S3, OpenShift, Docker, PostgreSQL, and Oracle databases.
- *Software Engineer* (Jan 2022 – Sep 2022): Responsible for developing in a code base of approximately 2 million lines of code using Java and the Scout framework with a custom business solution stack on top for a national car leasing provider.

Bank for International Settlements

Full-Stack Software Engineering Contractor

Basel, Switzerland

Feb 2020 – Sep 2021

- Partnership of the BIS and the University of Basel under the direct supervision of Prof. Dr. Heiko Schuldt.
- Responsible for contributing to a natural language processing project stack in a Linux/Python/PostgreSQL/Azure DevOps/Angular environment, development and maintenance of information retrieval system.

RESEARCH EXPERIENCE

University of British Columbia

Master thesis at the CIRRUS Lab

Vancouver, Canada

Nov 2023 – Apr 2024

- Working with Asst. Prof. Dr. Mohammad Shahrads on CHOREOGRAPHER, an open source serverless load balancer that distributes client requests by automatically finding the most suitable serverless deployment.
- Implementing the initial version of CHOREOGRAPHER with the connected optimisation problem which is formulated as a zero-one integer linear program.
- Evaluating the performance of Choreographer on a variety of serverless workloads and cloud platforms.

ETH Zürich

Distributed Systems Laboratory

Zürich, Switzerland

Sep 2022 – Jun 2023

- Working with Prof. Dr. Ana Klimovic on MODYN (paper *A Platform for Model Training on Dynamic Datasets* published at *EuroMLSys23*), a work-in-progress open-source platform that enables ML researchers and practitioners to explore a wide variety of training and data selection policies.
- Worked on systems architecture with regard to data storage and retrieval in the context of the research platform and supported other researchers in architectural decisions with regard to data storage and cloud utilisation.

- Implemented a data storage abstraction layer that enabled a multitude of storage formats and platforms as well as research into data retrieval and storage costs with regards to dynamic datasets.

ETH Zürich

Zürich, Switzerland

Cloud Computing Architecture Course Project

Feb 2022 – June 2022

- Developed a dynamic scheduling algorithm for a cloud computing system that enables the system to dynamically adapt to the workload and the available resources.
- Part of the lecture Cloud Computing Architecture which covers topics including server design, cluster management, large-scale storage systems, serverless computing, data analytics frameworks, and performance analysis.
- The project was supervised by Prof. Dr. Ana Klimovic and Prof. Dr. Gustavo Alonso.

Databases and Information Systems (DBIS) group

Basel, Switzerland

Undergraduate Research Assistant and Bachelor Thesis

Jan 2021 – Sep 2021

- Working with Prof. Dr. Heiko Schuldt on vitrivr participating at the Video Browser Showdown (VBS) in 2021 by actively developing temporal querying algorithms for multimedia item retrieval.
- Developed a temporal query parser and optimiser for the vitrivr system that enables users to query multimedia items by time intervals as part of my Bachelor Thesis (Grade 6.0).
- Contributed to papers *Interactive video retrieval evaluation at a distance: comparing sixteen interactive video search systems in a remote setting at the 10th Video Browser Showdown*, *Multi-modal Interactive Video Retrieval with Temporal Queries*

SKILLS

Programming: C, C++, Java, Kotlin, Python, MATLAB, R, SQL, Go, TypeScript

Technologies: Git, TensorFlow, Apache Kafka, Docker, Kubernetes, PostgreSQL, HDFS, Spark, Unix, Ansible, Terraform

RELEVANT COURSEWORK

Major coursework: Cloud Computing Architecture, Design of Parallel and High-Performance Computing, Advanced Systems Lab, Information Security Lab, Research Topics in Software Engineering, Distributed Systems Laboratory, Computer Architecture and Operating Systems, Software Engineering, Algorithms and Datastructures, Databases