Personal information upon request.

Education

• Bern University of Applied Sciences

- Bachelor of Science in Computer Science
 - Specialization in Computer Perception & Virtual Reality
 - Bachelor thesis: Implementation of a Real-time Streaming-based Terrain Level of Detail System (grade: A)
 - Project 2: *3D Terrain with Level of Detail* (grade: A)
 - GPA: 5.35 / 6.0 (unofficially calculated from ECTS grades)

Professional Experience

• Swiss Bankers Association

ICT Intern

August 2020 - June 2021

Basel, Switzerland

Biel/Bienne, Switzerland

September 2021 - July 2024

- Developed a modern version of the *QI-Toolkit*, an internal web application for looking up U.S. double tax treaties, using Laravel and MySQL.
- Participated in the cloud migration project of the Swiss Bankers Association.
- Maintained the WordPress-based intranet site.
- Conducted first and second level support for internal and external clients.
- Supported the ICT Team in various organizational and technical matters.

Personal Projects

• Graphs

- A graph algorithm visualizer in JavaScript
 - Wrote a web-based graph algorithm visualizer in JavaScript using the Canvas API.
 - Implemented algorithms include depth-first search, breadth-first search and Dijkstra's algorithm.
 - Supports generation of randomized graphs and dynamic visualization speed.
 - $\circ~$ Live demo: graphs.amartabakovic.ch, source code: github.com/amartabakovic/graphs

• Sorts

A sorting algorithm visualizer in Vue

- Developed a web-based sorting algorithm visualizer in JavaScript using Vue.
- Implemented algorithms include bubble sort, selection sort, insertion sort, mergesort, quicksort, and more.
- Supports random shuffling of the input list and dynamic visualization speed.
- Live demo: sorts.amartabakovic.ch, source code: github.com/amartabakovic/sorts

Skills

- Programming languages: C++, Java, Python, JavaScript, C, PHP, Matlab, Haskell
- Frameworks & libraries: OpenGL, Maven, CMake, Node.js, Vue, Laravel
- Databases: MySQL, PostgreSQL, DynamoDB, SQLite
- Miscellaneous skills: HTML, CSS, Amazon Web Services, Git, Linux, Office 365, LATEX
- Languages: German (native), Serbo-Croatian (native), English (fluent), French (conversational, DELF B1)