Filip Kostic

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[LinkedIn](#) | [GitHub](#)

Technical Skills

Languages: C/C++, Java, Python, JavaScript

Technologies: Git, Docker, Make, GDB, Valgrind, Maven, JUnit, Ant, PyTest, Pip, venv, Yarn, Jira

Frameworks: JavaFX, GTK+, Flask, React

Databases: MySQL, PostgreSQL

Work experience

Software Engineering Intern   *May 2022 - Sept 2023*
Intel Corporation (now Altera), Toronto, ON

- Developed and maintained an IDE using Java for embedded systems programming with Intel FPGAs, enhancing UI simplicity and adding new debugging features.
- Increased IDE performance by 20% and reduced the code base by 25% while preserving functionality.
- Created C++ drivers to utilize FPGA hardware components for embedded systems labs.
- Authored comprehensive documentation to guide users through lab setups in Quartus.
- Represented Intel at the 2023 WISE national conference, hosting a workshop on Intel FPGA usage.
- Created oneAPI lab exercises focused on leveraging heterogeneous computing.
- Mentored university capstone students on implementing FPGA solutions with embedded C, guiding them in leveraging hardware capabilities to meet project goals.

Education

BASc. in Computer Engineering   *Sept 2019 - April 2024*
University of Toronto, Toronto, ON

Relevant Coursework: Algorithms and Data Structures, Computer Architectures, Software Engineering, Distributed Systems, Operating Systems

GPA: 3.93/4.00
Graduated with High Honours

Projects

Autonomous Farming Robot   *Sept 2023 - April 2024*

· An automated hydroponic farm.
· Developed an Android app to monitor sensor data, view real-time plant camera feeds, and control harvesting.
· Built a Flask-based web server with REST API to enable communication between the robot and the app.
· Implemented real-time sensor monitoring with alerts for hydroponic solution deficiencies.
· **Awarded a Certificate of Distinction for outstanding project work.**

Beaver-Buzz   *Sept 2023 - Nov 2023*

· Developed a website for UofT students to create and sign up for events.
· Utilized a React frontend and Flask backend, with PostgreSQL for data storage.
· Deployed the website on Heroku for seamless hosting and scaling.
· Participated in code reviews, providing constructive feedback and ensuring code quality.
· **Achieved 5th place out of 26 in the class for project performance.**

Gretzky-IS   *Jan 2021 - April 2021*

· Developed GIS software using C++ and GTK for the user interface.
· Implemented features for interactive mapping and spatial data visualization.
· **Ranked in the top 20% of the class for project performance**