

# Filip Kostic

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

## Technical skills

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**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

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### Software Engineering Intern

*May 2022 - Sept 2023*

Intel Corporation (now Altera), Toronto, ON

- Developed and maintained an IDE 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.

## Education

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### BASc. in Computer Engineering

*Sept 2019 - April 2024*

University of Toronto, Toronto, ON

*Relevant Coursework:* Programming Fundamentals, Algorithms and Data Structures, Software Engineering, Distributed Systems, Operating Systems, Computer Security

*GPA:* 3.93/4.00

*Graduated with High Honours*

# Projects

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## **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.
- **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**

Last updated: August 24, 2024