

Aditya Pisharoty

☎ 416-848-9542 | ✉ aditya.pisharoty@mail.utoronto.ca | in [LinkedIn](#) | GitHub | Website

TECHNICAL SKILLS

Programming Languages: Java, Python, C/C++, SQL, JavaScript, HTML/CSS, MATLAB, RISC-V Assembly
Frameworks/Libraries: PyTorch, TensorFlow, torchvision, React, Node.js, pandas, NumPy, Matplotlib, GTK
Developer Tools: Git, Docker, Google Colab, Visual Studio Code, Linux

EDUCATION

University of Toronto — Computer Engineering Student Sep. 2023 – Apr. 2028 (Expected)
Bachelor of Applied Science and Technology, Intended Minor in AI Engineering Toronto, ON

Key Courses: Computer Fundamentals (C), Programming Fundamentals (C++), Computer Organization (RISC-V Assembly), Fundamentals of Deep Learning, Data Structures & Algorithms, Operating Systems

EXPERIENCE

Engineering Design Team Lead Sep. 2024 – Apr. 2025
University of Toronto Robotics Association Toronto, ON

- Led a 5-member team in a university-wide robotics sumo combat competition.
- Engineered a 3D-printed autonomous robot with SolidWorks; programmed movement logic in C++ on Arduino to integrate multi-sensor input.
- Achieved **1st place** in the university through optimized drive algorithms, enabling precise detection and evasion.

Product Specialist (Intern) May 2024 – Aug. 2024
Bell Canada Toronto, ON

- Executed functional and regression testing for software updates across iOS and Android, coordinating test cycles and QA activities with cross-functional teams.
- Authored detailed reports and defect logs in Jira; ensuring reproducibility and clear developer handoffs.
- Delivered a final QA presentation highlighting critical test insights that uncovered **30% more high-priority defects** compared to earlier cycles.

PROJECTS

PlantNet AI | *Python, PyTorch, Pandas, NumPy, Matplotlib, Google Colab* May 2025 – Aug. 2025

- Designed a custom convolutional neural network (CNN) architecture to identify diseases in corn plant leaves.
- Trained on a variety of corn and non-corn plant disease datasets, ensuring robust training on diverse conditions.
- Enhanced model performance with batch normalization, dropout, and adaptive pooling.
- Final model achieved **94.1% test accuracy** and **96.44% accuracy on unseen data**, outperforming baseline models by over 7%.

Stride GIS Application | *C++, GTK, Git, CSS* Jan. 2025 – Apr. 2025

- Developed a full-stack mapping application in C++ using OpenStreetMap data, integrating external APIs (e.g., weather, public transit) for enriched contextual information.
- Built an interactive user interface with EZGL and GTK libraries, supporting zoom, pan, and dynamic rendering.
- Implemented shortest-path algorithms (Dijkstra's and A*), leveraging multithreading to handle large maps.
- Improved **average route-finding time by 55%**, enabling fast results for queries across a city-scale dataset.

FPGA Poker Simulator | *C, RISC-V Assembly* Jan. 2025 – Apr. 2025

- Designed a Texas Hold'em Poker simulator on a DE1-SoC FPGA board with PS/2 keyboard controls.
- Implemented game logic in C for a full 52-card deck with shuffling, dealing, and managing game states.
- Rendered all cards on VGA output, with individual hands displayed at the bottom of the screen.
- Enabled smooth **60 FPS** rendering, supporting four simultaneous players without input lag.