YUVI BHATOOLAUL

PROFILE

Prospective 3rd-year Computer Science student at the University of Toronto seeking a Winter 2026 internship at RBC. Strong foundation in software development, algorithms, data structures and design patterns, with hands-on project experience in Java, Python, C and PostgreSQL. Eager to tackle challenging problems, learn collaboratively, and apply academic knowledge to develop and support scalable applications for RBC's Technology and Data teams. Bilingual (French & English).

SKILLS SUMMARY

Languages: Python, Java, C, HTML Frameworks & Tools: JavaFX, Git, Scrum

Databases: PostgreSQL

PROJECTS

Food Database Web Application

August, 2025

Skills: Python, PostgreSQL, SQL Optimization, NLP, Transformers

- Engineered a PostgreSQL-backed system for storing, querying, and filtering large-scale food datasets with detailed nutritional attributes, managing over 1000 product records.
- Implemented advanced NLP capabilities using Transformers to automatically generate concise nutritional insights for each food item.

Custom Bash Shell January, 2025

Skills: C, Unix System Calls, Process Management, I/O Redirection, Pipes, Signal Handling, Memory Management, Git

- Engineered a Unix-like shell in C with support for command execution, background/foreground processes, and robust error handling.
- Implemented advanced features including I/O redirection, multi-stage piping, and efficient command parsing.
- Integrated low-level signal handling (SIGINT, SIGCHLD) and optimized memory allocation to ensure reliability and performance.

Paint November, 2024

Skills: Java, JavaFX, RegEx, FSMs, Al Integration, Git, Scrum, Object-Oriented (OO) Design

- Developed a full-featured Java paint application with a 4-member team, improving collaborative project efficiency through Scrum methodology and Git.
- Integrated Al(Ollama)-based image generation and ReqEx/FSM-based parsing to automate user-created drawing processing.
- Applied OO Design principles by implementing multiple design patterns (MVC, Command, Factory, Strategy, Observer). Enabled modular architecture to facilitate future feature additions/maintenance and reduce code redundancy.

EDUCATION

University of Toronto (Mississauga Campus) — Mississauga, ON

Expected Jun. 2028

Specialist in Computer Science

• **GPA:** 3.46/4.00

• Honours & Awards: Dean's List Scholar (2024), Entrance Award of Distinction

École Secondaire Jeunes sans Frontières — Brampton, ON

Jun. 2023

Ontario Secondary School Diploma and International Baccalaureate (IB) Certificates

• Certificates & Awards: IB Higher Level (HL) Math, Standard Level (SL) Physics & Chemistry, Euclid Math Contest School Champion

LEADERSHIP & EXTRACURRICULAR

University of Ottawa — Ottawa, ON

Telfer Internal Case Competition

Nov. 2022

• Led a 3-member team to the finals of a timed business case competition by analyzing complex business problems and presenting innovative solutions.