

Rishistav Ray

+1 647 896 8248 | rishi.ray@mail.utoronto.ca | <https://linkedin.com/in/rishistav-ray> | <https://github.com/RishistavRay>

An aspiring Computer Engineer studying at the University of Toronto with a keen interest in **Software Development** and **Engineering Design**.

EDUCATION

University of Toronto

Bachelor of Applied Science and Engineering

Ontario, Canada

September 2020 – Expected May 2025

Major: Computer Engineering

Minors: Engineering Business, Artificial Intelligence

PEY Co-op Term: May 2023 – September 2024

Relevant Coursework: Software Communication and Design, Programming Fundamentals, Algorithms and Data Structure, Introduction to Databases, Applied Fundamentals of Deep Learning, Computer Networks I, Engineering Strategies and Practice I & II

TECHNICAL SKILLS

Programming: Typescript, C#, C, C++, Python, HTML+CSS, SQL, ARM Assembly, BASIC, MATLAB, VERILOG

Libraries: NumPy, PyTorch, OpenCV, Network Programming

WORK EXPERIENCE

Software Developer (Intern) at SOTI Inc., Mississauga

June 2023 – August 2024

- Fully in-charge of developing front-end for multiple features in flagship software MobiControl. Entirely took responsibility for developing and fine-tuning feature workflows for end-users.
- Ensured every feature was developed before the deadline enabling team to expand its development queue and take on three more features with confidence.
- Fully understood and leveraged the Angular Frontend and C# Backend working synonymously with SQL Database to develop features alongside senior developers. Contributed to essential feature improvements in core areas of MobiControl such as Profile Management and Policy Management to reduce load on the server by developing a Cache component from scratch. Ensured reusability and scalability to enable future use.

RELEVANT EXPERIENCE

UniMap: Software Communication and Design

September 2021 – December 2021

- Conceptualized and developed a fluid “Maps” application, UniMap in a team of three
- Implemented features catered towards university students such as navigation between classes, to-do lists and bookmarks
- Gained collaborative-experience using Git SCM and explored graphic libraries such as EZGL and GTK widgets
- Used the OpenStreetMap database and API to extract and visualize geographical data on the map
- Implemented and optimized path-finding algorithms like multi-Dijkstra’s and 2-Opt to find shortest optimal map routes
- Designed an intuitive User-Experience using Auto-Fill Search Bars and seamless transitions between map modes

Messaging App: Computer Networks I

March 2023 – April 2023

- Developed a Messaging app on a Linux-based platform, incorporating advanced network protocols to encrypt messages
- Established a server-side database to securely store group chats and media files for each user account
- Implemented a robust ACK mechanism to ensure reliability during data transfer
- Deployed Access Control using Password Login to successfully prevent unauthorized access to user accounts

Web Development: JavaScript – The Complete Guide 2022 Online Course

February 2023 – April 2023

- Created interactive websites like Movie Tracker and Reminders, and Webpage markups of Amazon and YouTube using JavaScript, HTML and CSS. Demonstrated an understanding of how to query and edit DOM objects in real-time.
- Capable of manipulating visual details such as clicks, hovers, and button transitions to improve user experience.

Game Development: Computer Architecture

November 2021 – December 2021

- Created an arcade machine and game – Web Slingers using DE1-SoC board, an external monitor and controllers

- Implemented finite-state machines to construct obstacles in the path depending on user's movement
- Designed in-game physics for this 2D game in Object-Oriented C, including projectiles, collisions and centripetal forces

Construction Project: Engineering Strategies and Practice II

September 2020 – December 2020

- Helped design and renovate a laundry room for Birch Housing to abide with Accessibility Laws in Ontario, Canada
- Organized team responsibilities using OpenProject, reduced the average time to complete each milestone by 40%
- Propelled group discussions and client negotiations as the Communications Manager of the Team

COMMUNITY INVOLVEMENT & PERSONAL INTERESTS

CanSupport: Fundraiser for Cancer Patients

January 2018 – April 2020

- Proposed the idea of organizing a "Bake Sale" as part of the annual fundraising drives in high-school
- Proposal and execution resulted in a 90% increase in funds accumulated compared to the previous year
- Actively involved the school community and inspired a greater level of engagement through a successful initiative.

Bachelor of Music: Singing

May 2011 – Present

- Performative distinction in Classical Music, earned after eight years of rigorous training and dedication
- Appointed Lead vocalist in the high school choir and a frequent participant in university events
- Proposal and execution resulted in a 90% increase in funds accumulated compared to the previous year
- Actively involved the school community and inspired a greater level of engagement through a successful initiative.

