

# Uzma Ferdous

uzma.ferdous@mail.utoronto.ca | 647-772-8324 | [GitHub](#) | [LinkedIn](#) | [Portfolio Website](#)

## EDUCATION

### University of Toronto, B.A.Sc in Computer Engineering

2021 – 2026 (expected)

- Awarded Dean's Honour List (2021/22 Fall, 2022/23 Fall)
- Relevant courses:** Software Design and Communication (C++), Programming Fundamentals (C++), Computer Fundamentals (C), Computer Organization, Digital Systems, Calculus III, Linear Algebra
- Clubs:** Cybersecurity Student Association Lead, Engineering Society Web Developer, Frosh Web/Tech Team, ECE Ambassador, Frosh Handbook Executive

## SKILLS

|                  |  |
|------------------|--|
| Programming      | C/C++ • Python • React.js • HTML/CSS • JavaScript • Verilog • PowerShell |
| Tech & Database  | Docker • Google Cloud Platform • Google Firebase • MongoDB • MySQL       |
| Tools & Concepts | Git/GitLab • Jira • Confluence • Heroku • CI/CD • Agile Development      |

## EXPERIENCE

### Infrastructure & Cloud Operations Intern, Questrade Financial Group

May 2023 - present

- Gaining hands-on experience with **Google Cloud Platform** (GCP), **Terraform**, and **GitLab** to write, test, and document infrastructure automation code, as well as manage cloud resources
- Utilizing **IT management** tools such as Device42 and vSphere to correct 100+ device inventory records, manage network infrastructure, and generate detailed reports for optimizing resource allocation
- Leveraging **Jira** and **Confluence** to review and document code, according to industry conventions and guidelines

### IT Intern, Children's Aid Society of Toronto

June - September 2022

- Configured Checkpoint security for **400+** Lenovo laptops and used **Microsoft Excel** to keep record of progress
- Key achievement:* Successfully prepared **800+** laptops for deployment to office employees

### IT Field Staff, Toronto District School Board

July - August 2021

- Supervised the return of **15,000** TDSB-loaned devices and reported team progress to IT supervisors and staff
- Recorded software issues and/or electronic damages for all chrome books using **Google Suite** tools

## PROJECTS

### E-Commerce Art Website ([Link](#) → [GitHub](#))

May 2023 - present

- Designing and building an e-commerce website to sell my paintings using **React.js** and **Next.js**
- Implementing admin management functionalities to manage pricing and resources
- Creating checkout page with **Stripe** for payment processing and **MongoDB** to store user information

### Scavenger Hunt Mapper

January - April 2023

- Worked in a team of 3 using **C++** to extract geographic information from the **OpenStreetMaps** (OSM) database
- Developed custom algorithms for our **API** to parse and store data for roads, subways, points of interest, etc.
- Leveraged the GTK library to create a decluttered UI, including a directions sidebar, favourites list, and settings menu
- Implemented **STL data structures** such as hash maps and Tries to display map data and optimize search functions
- Secured **4th** out of 90 teams on course leaderboard for our 'Travelling Courier Problem' algorithm, implemented using **Multi-target Dijkstra**, **simulated annealing**, and **3 two-opt** operations

### "Tidey" - Interactive Syllabus Website ([Link](#) → [GitHub](#))

November 2022 – January 2023

- Used **React** and **Node.js** to develop a course organization website for university students to add/edit/delete courses, calculate and save grades, and store course-related files
- Integrated **Google Firebase** into the website using *Firebase Authentication* for user authentication, *Firestore Database* to add, delete, and edit courses, and *Firebase Storage* to store user files