Uzma Ferdous

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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 Gro *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