

# SHAZIAH GAFUR

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## SELECTED SKILLS

**Languages:** Java, C/C++, Python, JavaScript, Assembly, Verilog, HTML, CSS

**Tools:** PyTorch, NumPy, Git, MS Office, MATLAB, Postman, Solr

**Frameworks:** Spring Framework, Django, NodeJS, ExpressJS, ReactJS

**Databases:** MongoDB, PostgreSQL, SQL, CRUD & REST APIs, Access

## WORK EXPERIENCE

**Software Engineering Intern | Royaltymine (formerly ZHY Interactive Incorporated)** *Toronto, Ontario | June 2019 – Aug 2019*

- Developed cloud-based application from scratch with team of 10 interns using **NodeJS**, **MongoDB**, **React** to sustain online marketplace for music creators and investors to share music and collect royalties; currently used by over 300+ members
- Defined architecture and data models, managed tracking of revenue and user analytics, implemented back-end features from scratch, and established flow of payment splitting among shareholders; reported royalty earnings with 100% accuracy
- Created **REST APIs** through React and NodeJS for performing CRUD operations and facilitating database transactions
- Performed automated and manual testing with **Postman** and **MochaJS** to enhance back-end features and API endpoints

**Information Technology Business Analyst | Bell Canada**

*Mississauga, Ontario | May 2020 – Aug 2020*

- Reconstructed obsolete website for Operations Technical & Systems Support using **Java's Spring Framework** and **Spring MVC architecture**. Mentored the original creator who formerly built the site with Classical ASP and static HTML and CSS
- Engineered new web components including employee login & authentication to enhance security of 1000+ employee users
- Crafted search engine and implementation for Corporate Asset Library with **Solr**, increasing relevancy of results by 60%
- Designed new data mapping for increasing efficiency of flows of IT Configuration Items among 10+ data sources

## EDUCATION

**University of Toronto St. George**

*2018 – 2022 (expected)*

Computer Engineering | Bachelor of Applied Science

**Relevant Coursework:** Software Design & Communication, Algorithms & Data Structures, Operating Systems, Machine Learning Fundamentals

## PROJECTS

**All Nightr – A GIS Map application helping students navigate at night**

*Jan 2020 – April 2020*

- Developed an application for students to locate study spots and places for food outside of class hours, as part of course ECE297 (Software Design and Communication) in **C++** using the **Open Source** code of OpenStreetMap
- Implemented path finding algorithms for determining directions, shortest routes, and constrained paths
- Created tactics to predict user's search requests with suggestive text, reducing chance of user error by 50%
- Enhanced performance by 60% and memory usage by 30%; optimized map visualization using the **Open Source** GTK toolkit

**Process Improvement | reBOOT Canada**

*Oct 2018 – July 2019*

- Resolved complications of data integrity and tracking by creating the first cloud-based **relational** management system in **Python** for controlling flow of hardware donations; enabled task automation to shrink data input time by 3 times
- Integrated **PostgreSQL** database and **Django** to perform analytics, user authentication and facilitate database transactions

**Augmented Workouts**

*Winning Project at JAMHacks 2017 hackathon*

- Designed fitness gaming console to make wearisome exercise more enjoyable by immersing the user in a responsive 3D virtual environment using the Xadow Intel Edison development board; participants reported 70% more willing to exercise
- Generated a pedometer and calorie counter using **C++** and **Arduino** to interpret gestures as exercise movements
- Achieved strong foundation of hardware components by debugging conflicts and connecting different types of interfaces

**BTOC Solutions**

*Oct 2016 – March 2017*

- Solved issues of data loss and inefficient storage by implementing the first-ever database management system from scratch using **SQL**, **Microsoft Access** & **Excel**; structuring client information for 100+ television service subscribers
- Reduced time for data retrieval by 3 times; produced data clarity by creating meaningful insights from 15+ SQL queries
- Decreased chance of input error by 5 times by improving input validation with input masks, macros and by building 10 forms

## LEADERSHIP & ACTIVITIES

**University of Toronto Machine Intelligence Student Team – VP of Industry Relations & Career Advisor** *June 2020 – Present*

- Managing team of 5 to execute 5+ career-related events in machine learning, including technical workshops and panels
- Securing sponsorship and maintaining relations with industry partners of 10+ companies and UofT student organizations
- Point of contact for career support; composing career resources for students [here](#) and contributor to [bi-weekly newsletter](#)