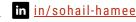
# Sohail Hameed

COMPUTER SCIENCE | SOFTWARE ENGINEER





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sohailhameed.me

#### EDUCATION \_\_\_\_

**University of Toronto B.Sc.Computer Science** 

SEP 2016 - NOV 2021

cGPA 3.57/4.00

Courses: Data Structures, Algorithm Design and Complexity, Parallel Programming, Operating Systems, Machine Learning, Databases

## SKILLS \_

Languages:

**Technologies/Frameworks:** 

Proficient: C/C++, Python, JavaScript/TypeScript, Java, SQL/NoSQL

Prior experience: HTML/CSS, C#, Ruby

Proficient: Git, Docker, NodeJS, MongoDB, Angular, Bash, Flask, Django Prior experience: React, Rails, Kubernetes, OpenMP, MPI, CUDA

#### WORK EXPERIENCE \_\_\_\_\_

## **Qualcomm** | Software Engineer - Video Analytics & Processing Team

SEP 2019 - PRESENT

- Developed a Metadata Manger for the Snapdragon Video Post Processing library in C/C++ enabling the library to unify how all metadata is handled is video post processing pipeline
- Redesigned the Software Stack for the Application Estimation Modeling (AEM) Tool and Viewer to make the system more organized and efficient
- Migrated old CouchDB data to MongoDB and designed new a database schema along with relevant NoSQL queries
- Created Python functions and classes to effectively manipulate data on the server side using Pandas & NumPy
- Implemented Restful APIs in Flask and an Angular & plolty.js based website that allows user to access data from the AEM server side and manipulate that data into graphs and other info graphics

## Citi Group | Technology Summer Analyst - Rate Trader Desktop

JUN 2019 - AUG 2019

- Gathered user statistics and created JavaScript/PowerShell scripts to convert config data in the process of migrating Users from 20+ WPF/C# Trading Grids to their Electron/Angular based counter parts.
- Developed the UST Covariance Hedge Ratio Grid in **Angular** to replace its old WPF/C# counter part
- Implemented a data enricher for the UST Covariance Hedge Ratio Grid using Rxis & TypeScript to process and handle a data chain of 20,000+ records without impeding the grid's or server's functionality
- Created event handlers for the grid-to-grid messaging system to allow for the UST Covariance Hedge Ratio Grid to respond to changes in associated girds

## University of Toronto | Full Stack Web Developer - DCS Projects

MAY 2018 - AUG 2018

- Developed new features for the Programming Classroom Resource System using **Django** and other web technologies
- Updated the main UI using JavaScript and HTML Canvas to a new graph-based system, which enabled instructors to create exercises and link them via dependency lines
- Implemented GET & POST APIs and linked user facing components for the new UI to the Backend

#### PROJECTS\_\_\_\_

### AI-Eat-Green

Developer | Personal

https://github.com/Karl-Cui/ai-eat-green

Angular | Ionic | Python | AI | Azure

- A behaviorally informed mobile application that searches for environmentally-friendly recipes and ingredients, provides the "sustainability scores" for recipes based on greenhouse gases emissions, and land and water usage, and tracks the sustainability of one's long-term dietary pattern
- Achieved **Top 25** in the Agorize Al for Societal Impact Challenge

# **Virtual Mystery**

Developer | Academic

Django | PostgreSQL | Angular | Python | Docker https://github.com/utmandrew/virtual-mystery

- Developed a Web Application using Django, Angular and PostgreSQL, where student from an undergraduate anthropology course complete Assignments in groups, can study virtual artifacts.
- Presented the project at the 2019 University of Toronto Teaching & Learning Symposium and Digital Humanities and Computational Sciences Conference, discussing the projects usage as an Online Spaces for Collaborative Active Learning in Large Classes