# Abdullah Shahid

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#### **EDUCATION**

#### University of Toronto

Toronto, ON

Honours in Bachelors of Science (H.Bsc.), Computer Science + PEY Co-op

Sep 2020 - May 2025

- Cumulative GPA of 3.78 / 4.0
- Relevant Courses: Software Design, Systems Programming, Intro to Databases and Webapps, Spatial Data Science, Data Structures and Algorithms

### EXPERIENCE

#### Software Engineer

May 2022 – September 2022

UofT Hatchery

Toronto, ON

- Designed the appropriate technology stack for building a mobile application to handle sensitive data resulting in a smoother software development process
- Assisted with the design of the cloud architecture using Amazon Web Services (AWS) while adhering to The Health Insurance Portability and Accountability Act (HIPAA) compliance
- Took initiative in learning React Native and went on to successfully develop various features in the mobile application
- Developed a RESTful API in Python Flask for the mobile application to communicate with the cloud database

## Software Developer

May 2022 – August 2022

University of Toronto

Toronto, ON

- Analysed and worked with a large code base developed in Python Django to develop various features into the University's learning platform for first and second year students
- Assisted with the research and development of "Parsons Problem" inside the learning platform to improve students' learning experience for the upcoming semester
- Optimized the algorithm responsible for loading the test cases for each problem and reduced the number of database queries by 90%
- Modified the back-end such that it provides 'problems as a service' to non-authenticated users through an API

#### PROJECTS

MyShell | Linux, C, Make, Valgrind

Jan 2022 – May 2022

- Built a powerful and versatile Linux shell in the C programming language with efficient memory management
- Created a linked list data structure to allow the users to dynamically create and store string variables
- Configured network sockets to allow for networking capabilities such as connecting and communicating with other shell instances over the internet
- Wrote code to concurrently execute multiple commands in parallel through the use of the pipe and fork system call in C

Workout Tracker | Java, Android Studio, Firebase, Git, UML

Sep 2021 – Dec 2021

- Built a native Android app using Java that allowed users to track their fitness routines
- Designed the software architecture around the SOLID principles resulting in reduced code dependencies and an extensible software design
- Configured and Integrated Google's Firebase API into the mobile application for authentication and database requirements
- Tested program thoroughly using Junit unit tests to guarantee that the application runs bug-free

Semtrack | Javascript, IndexedDB, Flask, Bootstrap

Nov 2020 – Jan 2021

- Built a web app using Flask and JavaScript that allowed university students to track their grades during the academic year
- Utilized the IndexedDB API to access and use the built-in browser database to save students' grades
- Configured and utilized Amazon EC2 to deploy the web app for the students to access

### TECHNICAL SKILLS

Languages: Java, Python, C, SQL (Postgres), JavaScript, HTML/CSS, R Frameworks: React, Flask, JUnit, WordPress, React Native, Django

Developer Tools: Git, Amazon Web Services, VS Code, Visual Studio, PyCharm, IntelliJ