# HAMZA ARSHAD

**DEVELOPER** 

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# **SKILLS**

#### FRONT-END

- Working knowledge with AngularJS in designing seamless interfaces
- Experience using D3JS and PhantomJS to render and visualize data.
- Knowledge of jQuery and vanilla JavaScript to enhance UI/UX of application.
- Intermediate skill with ReactJS

#### **BACK-END**

- Proficiency with Ruby on Rails to produce efficient web apps.
- Experience using NodeJS and Python in Flask web applications
- Utilized PHP as a backend for an internal dashboard
- Knowledge of C++/ C#

## **SERVER-SIDE & MORE**

- Experience with databases such as PostgreSQL, MySQL, SQLite3, Microsoft SQL Server
- Implemented military-grade RSA-AES Encryption to protect data
- Machine-shop knowledge (i.e. bandsaw, drill press, etc.)
- SolidWorks, AutoCAD, and 3Dprinting knowledge

## **EDUCATION**

## **UNIVERSITY OF WATERLOO**

- Candidate for Bachelor of Applied Science in Biomedical Engineering (3.95 GPA)
- Class representative for Engineering Society
- Relevant courses: Digital Computation, Data Structures & Algorithms, Prototyping, Simulation and Design

# **AWARDS**

## **UNIVERSITY OF WATERLOO**

 Awarded the President's Scholarship of Distinction (95%+ GPA)

### **GLENDALE S.S**

Cancer Assistance Program
 Award- Presented to a
 student who has
 demonstrated significant
 leadership while contributing
 to the community.

## **PROJECTS**

ANALYTICS - JAN 2019 - APRIL 2019

HealthIM

- Used AngularJS, D3JS, PhantomJS and jQuery to generate reports that would amass statistics regarding the organization.
- Utilized a Rails back-end to retrieve data from PostgreSQL database, and used sorting methods to organize the data.
- Made use of JavaScript's asynchronous functions to render charts in a headless browser using PhantomJS.
- Created a rake task paired with a CRON job to automate mailing.
- Decrypted identifiable information using RSA-AES encryption.

## CASE MANAGEMENT - JAN 2019 - APRIL 2019

HealthIM

- Used AngularJS, jQuery, ChartJS, HTML5 and CSS3 to produce a seamless interface to display patient history to hospital administration.
- Encrypted all identifiable data in-transit with military-grade RSA-AES encryption and used a PostgreSQL database.
- Utilized a Rails back-end to configure routes to get and post data.
- Began to rebuild the application with ReactJS.

#### INTERNAL DASHBOARD - MAY 2018 - AUG 2018

**Brantford Police Service** 

- Using PHP and a MySQL database, produced a seamless internal dashboard displaying relevant statistics from recent quarters.
- Thoroughly researched data-extraction techniques; tested and employed XHR Requests, Fetch API, jQuery AJAX requests, and CORS requests to withdraw and manipulate data from a variety of sources.
- Utilized Data-AOS libraries, CanvasJS, and jQuery to maximize UI/UX of application.
- Created a secure user authentication system so that police administration could edit and manage the dashboard.