



HAMZA ARSHAD

DEVELOPER • 2B BIOMEDICAL ENGINEERING

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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 **Python** in **Flask** web applications
- Utilized **PHP** as a backend to organize and sort data 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 **3D-printing** 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)

GLENDAL 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.

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.

To view all projects, go to hamzaarshad.com