Afshin Rahman

(403) 613-8264 | Afshinrahman0@gmail.com | https://afshinr1.github.io/

HIGHLIGHTS OF QUALIFICATIONS

- **Communication**: Fluent verbal and written communication skills in English, and always enthusiastic to meet new people
- **Teamwork**: Capable and comfortable working with a team demonstrated through multiple team projects and workplaces. Also, comfortable working individually when necessary
- **Problem solving**: Undertake weekly coding challenges which are time sensitive and require critical thinking and problem-solving skills to complete
- **Self-Starter**: Able to take initiative to learn something new unsolicited, such as new programming languages or concepts

TECHNICAL SKILLS

- **Proficient:** Java, C/C++, NodeJS, MySQL, HTML, CSS, JavaScript, ReactJS
- **Intermediate:** C#, Python
- **Familiar:** PHP, MongoDB
- **Tools and Technologies/Skills:** Object oriented programming, IntelliJ, Visual Studio Code, Eclipse, Git, Microsoft Office, Data Structures, REST API, Linux

EDUCATION

Bachelor of Science, 4th Year Software Engineering   **September 2017 to Present**
University of Calgary, Alberta
Relevant Courses

- **Data Structures and Algorithms**: Focused on data structures and algorithms, such as time complexity, graphs, double linked lists, and searching/sorting algorithms.
- **Software fundamentals**: Java based course which focuses on polymorphism, client-server, Java GUI interface, socketing and relationships between classes such as aggregation, composition, association. Heavy focus on UML notation/design and object-oriented programming.
- **Software design principles:** Focused on C++ fundamentals, design patterns and Object-Oriented designs. Learned polymorphism, generics, realization multithreading in C++, and important design patterns such as observer and decorator.
- **Embedded Systems:** Worked with embedded systems using Bit Wise operations to carry out labs and simulate real life applications. Practiced converting C++/C to assembly and vice-versa
- **Database Management**: Database management; includes learning SQL syntax and how to perform actions to update a database and prevent SQL injection. Build a website using PHP and MySQL as the backend, and HTML, CSS, as the frontend
- **Software Architecture**: Focus on software architectures such as micro services, database per service, MVC, CQRS and event sourcing. Built a website using a backend in Java and MySQL, and front end in HTML, CSS and JavaScript
- **Computer Networks**: Focus on understanding and applying TCP and UDP protocols, 5 network layers and HTTP requests from client to server applications
- **Software Requirements Engineering:** Focus on analyzing and gathering functional and non-functional software requirements from clients, as well as cost analysis. Practiced writing Software Requirements Specification document from gathered information
- **Software Testing:** Focus on testing fundamentals such as blackbox testing and whitebox testing, GUI automation testing (Sikulix/Selenium) and writing test cases in Junit. Test cases focus on finding and killing mutants, and increasing code coverage using data flow diagrams
- **Self-taught:** Using online tools such as Udemy and W3School, self-taught HTML, CSS, vanilla JavaScript, React and Nodejs and incorporated them into multiple web applications and projects.

- **Jason Lang Scholarship:** 2017,2018,2019

RELATED EXPERIENCE/PROJECTS

Freelance Developer   **July 2020 - Present**
- Created custom python script and personal websites for clients utilizing HTML, CSS and Javascript on upworks.com
- Documenting customer requests to implement into a website or script as part of the collaboration

Individual Projects
- **Chat App:** Realtime chat app which allows user interactions in real time through use of sockets. Allows users to interact through different rooms and usernames and allows changing themes. Front end created with ReactJS and backend/server side created with NodeJS and deployed on Heroku/netlify.
- **E-Commerce-App**: Full stack web application which allows businesses to display their products which they desire to sell and allow customers to buy and rate products, emulating websites such as Amazon. Written with MERN stack (frontend: ReactJS, backend: MongoDB, NodeJS) and MySQL using REST API
- **Amazon Price Tracker**: Python script which automates searching for an item on amazon using selenium, filters the products through price or ratings, and generates a report on the top items found.

Course Projects
- **Tool Shop Registration System:** A tool shop made with 3 team members consisting of a front end in Java GUI and backend in Java and MySQL using Object oriented programming methods. Basic functionalities allow users to list, add, and remove tools from an inventory, managed by a database
- **Property Rental System:** A GUI application made with 3 team members consisting of a front end in Java GUI and a backend in Java and MySQL using object-oriented programming methods. Allows for 4 different user modes (Manager, Customer, Landlord, Reg. Customer) in which each user has different functionalities
- **PostIt (Quora-like System):** Online website made with a team of 6 people, with frontend in HTML and JSP with a backend in Java and MySQL. This website allows users to create topics, create posts and comment on posts, using software architectures such as event-sourcing, CQRS and MVC
- **Online Product Registration System:** Online website with a front end in HTML, CSS with a backend in PHP and MySQL, which allows users to buy products from a catalogue, add items to the catalogue and view and change their items

Engineering Leadership Program   **September 2018 - Present**
- Demonstrated leadership by carrying out tasks and presentations within a strict deadline to first year students, explaining the opportunities and pros of pursuing a programming career

ADDITIONAL EXPERIENCE

McDonalds   **July 2017 to Present**
- Work with a team of numerous people to carry out tasks and maximize efficiency, leading to better teamwork
- Accustomed to a fast pace, stressful, time sensitive environment

Embedded in Embedded Club   **September 2019 - 2020**
- Created basic programs on an embedded system using LED's, buttons, and LCD screen
- Practiced reading and debugging existing code, and implementing new features to existing code

University of Calgary Orientation Leader   **September 2019**
- Responsible for leading a group of first year students around campus, and getting the students accustomed to a new environment

Engineering Mentorship Program   **September 2019 - 2020**

- Responsible for mentoring and guiding a first-year engineering student; providing advice, guidance, and study guides on how to excel their first-year courses and get into their engineering major of choice

INTERESTS

- Volunteering with public events such as orientation and Red Cross
- Coding challenges to improve my coding skills, such as on hackerRank
- Travelling: Countries visited include South Africa, Dubai, USA and Zimbabwe