Maxwell Tyson

Bachelor's Degree in Computer Information Systems
Mount Royal University
Major: Computer Information Systems
Minor: Business

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RELEVANT SKILLS

- Confident in programming languages, database management systems and run time environments such as: Java, Javascript, JQuery, Node.js, Pug, HTML, CSS, MySQL/Oracle, Mongoose/MongoDB, C/C++ (arduino subset), and C#
- Proficient in using project management software such as Microsoft Project, Jira, and Trello for the organization and creation of bug tickets, tasks, workflows, and deadlines.
- Experience with programming design patterns, and the differences in maintainability and scalability of these patterns.
- Effective in maintaining a high level of security standards in all aspects of both digital and non digital security practices.
- Efficient and thorough in the testing of applications using many different testing tools such as Selenium, Puppeteer, and JUnit.
- Fluency with Github, BitBucket, and Mercurial to maintain source control for complex applications
- Proficient knowledge in Linux, OSX, and Windows operating systems
- A love for robotics and working with microcontrollers and electronics in spare time.

RELEVANT WORK EXPERIENCE

ICE Health Systems — *Junior Software Developer*
May 2017 - December 2017

- Demonstrated strong problem solving skills through developing highly scalable and maintainable solutions for back end request/object validation, complex database operations, and front end user interface design elements.
- Node.js + Backbone, Java, and MySql skills were refined through debugging, testing, and feature development for a highly modular healthcare information system.
- Efficiently and accurately implemented and performed end to end manual and automated tests using Selenium with Browserstack, JUnit, and Puppeteer.
- Strong business communication demonstrated through the formal reporting of bugs, requirement changes, and new task creation using project management software like JIRA and Trello.
- Displayed strong ability to perform in both a team and individual work environment and meet strict feature release deadlines by producing high quality code with a high degree of test coverage and thorough supporting documentation and commenting.

RELEVANT PROJECTS

Big O Analysis of data structures - Developed linked list, and hash tables using both chaining and open addressing to compare the time of specific operations between these data structures.

- Operations that were successfully tested included add, find and remove for a list of 10,000,000 unique words and then analyzed for efficiency and scalability of these different data structures.

Analysis of Blackboard LMS - Research and proposal of Learning Management Software for MRU.

- Deliverables included a baseline project plan, use case diagram and descriptions of current system, Feasibility analysis of proposed systems, Cost Benefit analysis of proposed systems, Candidate solution matrix, data flow diagrams at several levels for current system, and a final presentation outlining a solution chosen for the organization.

IBM Watson Analytics - Use of 'Big Data' to generate infographics on the different food borne illnesses within the United States for the year of 2016

- Extrapolation of meaningful information to produce accurate infographics on the most common food related illnesses based on location, type of food, type of illness, age, gender, and many more dimensions so underlying patterns in the data could be realized and presented effectively.

MRU Navigation Application - Designed and implemented a Navigation app for MRU campus

- Successfully implemented application utilizing an MVC design pattern, a binary-tree data structure for local storage of classroom and location information, along with an intuitive user interface.
- Demonstrated skills towards the different SDLC methodologies, API services, and design patterns used in industry today
- Utilization of the Agile methodology 'Scrum' to manage the project effectively and handle a high volume of both functional and nonfunctional requirement changes throughout the development lifecycle.

Node.js Travel Image Application - An application to view, share, and download travel images.

- This project made use of the MEAN stack instead of the LAMP stack for development and involved the use of many different API's such as Oauth and Google maps.
- Implementation of both the back and front end of the application as well as the required express middleware for authentication and query validation with the final project being hosted on a live domain.

COMMUNITY INVOLVEMENT

Mount Royal University — *Explore IT Volunteer* — May 2016

- Assisted Prospective female students in workshops with programming by communicating technical information to a non-technical audience.

The Woof Pack — *Dog Walker* — 2015 - 2017

- Assist with dog walks and introducing socially reactive dogs into a pack environment.

Calgary Humane Society — *Event Volunteer* — 2013 - 2014

- Ticket sales for events, fundraising assistance, and event participation at many charity events.

The Mustard Seed (Inn From The Cold) — *Volunteer* — 2008 - 2014

- Aided in set up of facilities, the preparation of dinner, breakfast and a packed lunch for Calgary's homeless community.

AWARDS

Jason Lang Scholarship
2016 - 2017

- Awarded for maintaining academic excellence for the academic year of 2016-2017

Dean's Honor Roll
2016 - 2019

- Maintained GPA of over 3.5, making Dean's Honor Roll for 2015 through 2019