Daulton Baird Full Stack Developer

Striving to use my skills as a Software Engineer to build software with a purpose.

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Technical Skills

Programming Languages: C#, Python, JavaScript, jQuery, Java, PHP, R, C, HTML, CSS, SQL

Frameworks: React, Node JS, Laravel, Vue.js, Django

Related Technical: Git, Azure Devops, CI/CD pipelines, Agile Scrum, Kibana, Jira, Confluence, Trello, Tableau

Education

Bachelor of Science with Major in Computer Science, Minor in Data Science

The University of British Columbia, Okanagan Campus | 2021

Industry Experience

Software Developer

CentralSquare | December 2021 – Present

C# Vue.js JavaScript SQL Docker Kibana Linux

In this role I am working on CentralSquare's property tax team based out of Kelowna, BC. The team is building a web-based application that was developed with C# for the backend and Vue.js for the frontend. My responsibilities include developing and testing new features based on client specifications, deploying to testing environments using Continuous Integration (CI) and Continuous Deployment (CD) pipelines through Azure Devops, participating in agile scrum ceremonies, and investigating bugs from clients using Elastic Kibana server logs. As a part of this role I have learned how to program in C# and how to use the .NET framework including the usage of Language-Integrated Query (LINQ) and SQL queries, the Model-View-Controller (MVC) architecture, and using xUnit for writing unit and integration tests. I also expanded on my Agile Scrum knowledge to learn the difference between Scrum and Kanban, how to read and use burndown and burn up charts, and how the main scum ceremonies are run. The team is also maintaining a REST API for integration with various property systems so I have learned RESTful standards and how to create, test, and execute REST API endpoints including setting them up and execution through Postman and Swagger.

Software Developer/ Undergraduate Research Assistant

Makerspace UBCO | The University of British Columbia, Okanagan Campus | June 2018 – March 2020

Python HTML CSS Django

During my time working in this position, I developed the TextAnalyzer application for detecting keywords in paragraphs of text such as an essay using Python libraries such as tkinter, openpyxl, pandas, xlrd, and re. As a part of this project I also learned about version control and creating releases in the form of executables (exe files) using pyinstaller so that the application can be run locally without any python installation. The version control process for this project involved conducting user surveys to find out which aspects of the UI/UX could be improved for the users and what needed to be added in the next version. There was also plans to deploy this application to a website using Django so I conducted some research into the framework but it did not end up being completed while I was on this project. I was also responsible for providing walkthroughs and in-person

training to groups and 1 on 1 sessions for faculty, staff, and students working in the makerspace. I also utilized my web development skills to build the makerspace website using WordPress as well as some custom HTML and CSS.

Data Analyst/ Undergraduate Research Assistant

Department of Biology | The University of British Columbia, Okanagan Campus | June 2020 – August 2020

Python Conda PICRUSt2 R

In this role I learned how to analyze metagenomes and genetic sequences using PICRUSt2 Python library and Conda. This involved utilizing existing python library functions as well as building new ones from scratch that provided increased functionality as well as optimal execution time. Using the analyzed data, I organized the data into CSV and TSV files using Python and R libraries through the PICTUSt2 pipeline. With the organized data, I Visualized the data using R libraries ggplot2, pheatmap, and qiime. Then, I ran statistical analysis including p-tests on the data to test the hypothesis of the project. This improved my statistical analysis and data analysis skills and the results from this project were used in a PhD thesis in Department of Biology.

Software Developer/ Undergraduate Academic Assistant

R

Linux

Office of the Provost and Vice-Principal Academic | The University of British Columbia, Okanagan Campus | April 2018 – August 2021

Bootstrap

For this position, one of the projects that I worked on was the implementation of Canvas Catalog. My responsibilities for this were to design and customize the Canvas Catalog platform using custom HTML, CSS, JavaScript, and jQuery. Another one of the projects that I worked on in this role was the Time Estimator project. In this project, I was the sole web developer and my responsibilities were to develop and deploy the web application to a Linux server using R's shiny apps library as well as custom JavaScript, jQuery, HTML, and CSS. The other main web development project that I worked on in this role was the Curriculum MAP project. For this

Laravel

PHP

project, my responsibilities we to develop front-end pages (blades) using HTML, CSS, Bootstrap, and PHP as well as back-end emailing tools and data visualization using PHP and JavaScript. AS the Tech Lead in the Curriculum MAP project, I lead a group of six co-op students using agile scrum methodologies for the creation of a large portion of the administrative functionality of the Curriculum MAP project.

Related Coursework

CSS JavaScript jQuery

Chess Openings Trainer

COSC 499: Capstone | May 2020 - September 2020

React NodeJS HTML CSS

For my capstone project our clients were working on a web application for users to practice chess openings versus an automated opponent. This included asynchronous updates to game objects as well as live feedback on missed moves and the ability to go back in time to a previous state in the game. This was built from scratch using the JavaScript framework React with NodeJS on the backend and some HTML and CSS for styling of the website. There was also research conducted into artificial intelligence for the opponent to finish the game after the opening was completed but the feature was cut due to time constraints.