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■ ErnestChiu.com

🗮 Technical Skills

JavaScript, JSX, C, C#, Python, Java, SQL, HTML5, CSS3 Languages

ReactJS, AxiosJS, NodeJS, ExpressJS, MongoDB, Mongoose, Github/Git, ASP.NET Core, MS SQL

Server, jQuery, Bootstrap, WiX Toolset

Others Functional Programming, Object Oriented Programming, Database Optimization, MVC Architecture

Professional experience

May 2019 August 2019

Jana Technology, Software Developer

- > Developed a Cross Bore risk calculation product for gas distribution companies all over North America which was deployed and release in August 2019
- > Reduced 60% of a risk calculation algorithm's run time by thoroughly analyzing the algorithm and utilizing SQL Server Profiler to identify and index the correct tables in the database
- > Improved the flexibility and usability of the product by creating a SQL query to generate a location hierarchy in JSON format from a SQL Server table
- > Engaged with the full stack, from the front-end to the database layer utilizing all three layers of the MVC framework in ASP.NET Core to retrieve data from the database, manipulate the data and display information to the user
- > Built data visualization models by utilizing Chart.js and Razor Pages to effectively display relative Cross Bore Risk values
- > Constructed a customizable MSI package for clientele that was deployed onto an IIS Server by utilizing WiX Toolset

Projects

June 2019 Present

Money Manager

- > Created a MERN stack application that records a user's expenses and incomes
- > Utilized React and Axios. is to dynamically update the list of user's recent records when the component mounts
- > Achieved data persistence through mongoose and body-parser to store data in MongoDB
- > Created multiple routes and models to handle separate requests for handling revenue and expenses JavaScript | React | JSX | CSS3 | HTML5 | Bootstrap | Axios.js | Express.js | Node.js | Mongoose | MongoDB

January 2019

February 2019

Everyday App

- > Developed an app for managing daily tasks and information using **React**
- > Implemented a weather app that utilized live data through Axios.js to make a HTTP request

JavaScript React React Router JSX CSS3 HTML5 Axios.js

January 2018 February 2018

Ominio

- > Designed and implemented an Uno-style multiplayer card game in Java using Eclipse
- > Implemented multiple Object-Oriented Programming aspects such as: inheritance, encapsulation and polymorphism to create the cards and deck

Java HTML5 PHP CSS3 OOP



Extracurriculars

September 2015 April 2018

Student Council, Stouffville District Secondary School

- > Managed logistics for over 20 events (semi-formal, charity events, prom, etc.) alongside 10 council members
- > Volunteered over 300 hours to support school events and committees by overseeing council expenses and creating a student council website



Education

September 2018 April 2023

University of Waterloo, Bachelor of Computer Science

> Relevant Coursework: Designing Functional Programs, Elementary Algorithm Design and Data Abstraction