Matthew Farrell

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Marist College Poughkeepsie, NY 12601 Denver, CO 80204

OBJECTIVE

Web Development/Software Engineer position

EDUCATION

Marist College, Poughkeepsie, NY Bachelor of Science, May 2022

Major: Computer Science; **Minors**: Cybersecurity, Information Technology, Information Systems

Overall GPA: 3.31; Major GPA: 3.33

Merit Scholarship

EXPERIENCE

Compiler Design (January 2022 - May 2022)

•Created compiler from scratch in Java based on an LL1 grammar without using any compiler-compilers. Broken down into the four different stages of compilation: lexical analysis, parsing, semantic analysis, and code generation. Created Abstract and Concrete Syntax Trees, as well as a symbol table and token stream of the valid tokens.

Full Stack Client Application (August 2021 - December 2021)

•Created a website for a client that allows the user to manually enter their sleep data or connect their popular sleep tracking devices to their account (Oura/Apple Health). The data is analyzed through a machine learning algorithm to predict trends and provides a sleep score describing the overall quality of sleep.

Software Development (Fall 2020)

- •Created a virtual machine which implemented the following:
- •CPU pipeline which includes fetch, multiple decode, multiple execute, write back and interrupt handling steps
- •6502 instruction set and text encoding with ASCII

Information Technology and Information Systems (Sept. 2018 - Present)

- •Implemented a lost/found database and web front end using PHP and MySQL
- •Designed a large relational database for a multiplayer video game enterprise
- •Created a website for a mockup music company utilizing HTML, CSS, and JavaScript

TECHNICAL SKILLS

Languages: Proficient in Java, JavaScript, Python, HTML5, and SQL

Applications: React, Node.js, Bootstrap, Flask, PostgreSQL, Wordpress, Git

Operating Systems: Windows, Linux

Other: SCRUM, Agile Methodologies, Data Analysis

ACTIVITIES

Intramural Soccer at Marist (2018 - 2022)

ABOUT ME

Entrepreneurship and love for computer science at a young age - Began jailbreaking iPad/Android tablets at ages 14-16 to write code that allowed me to get coins (in game currency of a popular mobile game) at an exceptionally high rate. I created a large social media following as a result of my consistent success and branding, and had hundreds of people contacting me weekly wishing to buy the abundant amount of coins I had collected from my programs. This is where my passion for technology began.