

April McBroom

SOFTWARE DEVELOPER

Simsbury, CT | missmcone5@outlook.com

Objective

Software Engineer with extensive experience creating, debugging, and teaching programming languages. Seeking to join a cutting-edge and modern company that values expanding current knowledge and skills, offering a work-life balance model. I am motivated to secure a full-time position utilizing interpersonal skills, excellent time management, and problem-solving abilities.

Experience

Programming Instructor and Software Developer | Varsity Tutors | 2022-Present

- Teaching curriculum that expands into back-end, front-end, full-stack, and networking technologies for students of various age-groups from children to teenagers and adults.
- Providing step-by-step instructions on designated programming languages, including teaching advance concepts such as Data Structures and Algorithms.
- Planned and implemented curriculum for technology education from self-taught technical writing and implementation of programming languages.
- Assisted students with homework assignments, including CI/CD.
- Creating software for clients using JavaScript, C#, Python, HTML, CSS, Lua, and other languages/frameworks as needed for free-lancing purposes.
- Code, test, and debug software applications.

Cybersecurity Software Developer (REU) | North Dakota State University | January 2022-May 2022

- Conducted security audits to identify vulnerabilities.
- Performed risk analysis to determine appropriate security countermeasures.
- Researched and developed new computer forensic tools using C# for the Department of Defense.
- Code, test, and debug software applications.
- Manage and maintain existing software systems developed in C#, .NET Core, ASP.NET Web Forms and Entity Framework.
- Implement and manage CI/CD pipelines to automate build, test, and deployment processes, ensuring efficient and reliable software releases
- Conduct code reviews, refactor codebase, and optimize performance for scalability and efficiency

Software Developer | NASA Space Consortium CT | August 2020-May 2023

- Contributor and author of research on Electronic Computer-Aided Design E-Book.
- Developed a complete reference guide for Intel FPGA Quartus design tool aligned with NASA's mission statement as a Technical Writer.
- Composed sound rocket circuit boards with soldered modules and a modified Arduino in C++.

- Collaborated with cross-functional teams, utilizing AI with Python and Selenium Framework to create a new toolkit.
- Team Leader heading several different groups across projects.

Software Developer | University of Hartford CETA | August 2017-May 2023

- Implemented and debugged Quartus and Modulus Prime projects.
- Collaborated in team environments as Tech Lead.
- Maintained and modified the ASEE 2018 Website using HTML, CSS, and JavaScript.
- Developed Watermark Assessment Software with ABET.
- Set up and maintained FTP servers.
- Set up a Time Tabling software to be used by the University of Hartford: CETA Department.

Software Developer | IBM | January 2022-March 2022

- Collaborated with IT departments to develop infrastructure build-out strategy.
- Restructured old application processes to improve performance and integrity.
- Worked on data structures and algorithms using JavaScript.
- Collaborated across the nation with several different groups to work on projects such as React, Data Structures and Algorithms.
- Design and maintain database structures, write complex queries, and utilize Entity Framework for efficient data storage and retrieval in SQL Server.
- Code, test, and debug software applications.

Machine AI Developer | Hartford Funds | July 2022-November 2022

- Assisted in the development of data aggregation, integration, reporting, and analytical tools.
- Developed prototypes, proof of concepts, and final production deliverables.
- Utilized data modeling and evaluation strategies to find patterns and predict unseen instances.
- Developed ML algorithms to analyze historical data using Python and AWS.
- Created S3 Buckets to be used to automatically transfer information from one application to another.
- Code, test, and debug software applications.
- Provide technical support and troubleshooting assistance to end-users, addressing any software-related issues in a timely manner
- Work in Agile framework and providing estimates on user stories
- Interact with client to provide solutions
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Machine AI Developer | Google | April 2022-May 2022

- Involved in an analysis collaboration project with 3 universities including Steven's Institute and the New York State University with the University of Hartford.
- Conducted open-source crowd funding tools with Top Coder website.
- Gathered and organized information for research and software development.
- Presented material using Machine Learning frameworks such as Seaborn with MongoDB Atlas Cloud, and Google Collab.
- Code, test, and debug software applications.

Education

University of Hartford, BA, West Hartford | 2023

Major: Computer Science | Minor: Cybersecurity, Web Development

Skills & Abilities

- AWS, Big Data, Cybersecurity, Data Structures and Algorithms, Databases, Networking.
 - Programming languages: C#, HTML/CSS/JavaScript, Java, Python, Lua,
 - PowerShell.
 - Frameworks: Node.js, React, Angular, Django.
 - Servers: Azure, MySQL, SQL, T-SQL.
 - Leadership, Technical Writing, Problem Solving, Teamwork and Collaboration.
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