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**Qualifications Summary**

Growth focused and dedicated professional with ability to leverage unique blend of mathematics and computer science experience, valuable practical exposure, academic foundation, and coding proficiency.

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| Software Engineering   * Proficient in executing software development methodologies/projects, adapting various technology stacks, ensuring seamless software development, and delivering high-quality solutions. * Skilled in troubleshooting technical issues, performing systematic debugging, and applying effective fixes to enhance software performance.   Research & Development   * Adept in formulating productive strategies, conducting comprehensive analysis, and collaborating with interdisciplinary teams and professionals to achieve objectives. * Expert in providing hands-on insights, leveraging logical thinking, and driving outcomes in dynamic and evolving environments. | Computer Programming   * Competent in multiple programming languages, overseeing database management, and utilizing software development frameworks and libraries. * Proficient in applying advanced mathematical concepts to develop complex algorithms and data science solutions. * Skilled in formulating robust software architecture and applying object-oriented design patterns.   Key Skills   * Education focused on safe systems programming, laying strong foundation for secure software development practices. * Passionate about optimizing code for enhanced software performance and exploring opportunities for continuous improvement. |

**Professional Experience**

**DePaul University, Chicago, IL** **2022 – 2023**

**Teaching Assistant – Python Computer Science Lab**

* Coordinated closely with multiple professors to efficiently manage Python CS Lab sessions for their respective courses. Enhanced lab content to ensure relevancy and effectiveness.
* Improved assignment grading process to provide timely feedback and accurate evaluations.
* Facilitated seamless communication for over 50 students across different sections.

**Harold Washington College of City Colleges of Chicago, Chicago, IL** **2019 – 2022**

**Adjunct Instructor in Mathematics**

* Successfully guided students in the transition to a remote learning environment during the Covid-19 pandemic
* Participated in training sessions aimed at fostering collaboration with DePaul/Harold Washington Faculty to enhance support for academic requirements of DePaul Harold Washington Academy.

**Pierpont Community and Technical College, Fairmont, WV 2015 – 2019**

**Coordinator & Assistant Professor in Mathematics**

* Guided students through a wide range of mathematics courses by optimizing understanding and proficiency in mathematical concepts.
* Crafted and refined curriculum to align seamlessly with Pierpont degree programs and accreditation standards to augment educational quality.
* Mediated student and instructor conflicts by fostering harmonious learning environment and improving relationships.

**Multiple Colleges in Chicago, IL - Suburbs 2012 – 2015**

**Adjunct Instructor in Mathematics**

* Streamlined administrative processes at Prairie State College to increase operational efficiency.
* Orchestrated initiatives to elevate online engagement at Southern New Hampshire University, while cultivating dynamic virtual learning community.
* Overhauled curriculum delivery methods at Northwestern College to boost student engagement and performance.

**West Virginia High Tech Foundation Consortium/West Virginia University, Morgantown, WV** **2010 – 2011**

**Mathematician Intern/Research Assistant**

* Analyzed programmed, and presented findings as a member of a research team testing a genetic algorithm that governed the machine vision of an unmanned vehicle for a military project.
* Contributed to enhancement of flight path coordination algorithm to ensure precision and efficiency in aircraft navigation.
* Refined neural network trained on survey data to augment effectiveness in data analysis and pattern recognition. Successfully communicated the application of artificial intelligence to social science researchers.

**Education**

**Master of Science in Computer Science, 2023**

DePaul University, Chicago, IL

**Master of Science in Mathematics**

West Virginia University, Morgantown, WV

**Bachelor of Science in Mathematics**

West Virginia University, Morgantown, WV

**Additional Coursework as a Non-Degree Seeking Student**

Differential Equations, PhD level course

University of Illinois, Chicago, IL

Mathematical Analysis & Partial Differential Equations, PhD Level Course

West Virginia University, Morgantown, WV

**Technical Proficiencies**

Object Oriented Design Patterns | C, C++, Rust | Python, Java, C#, F# | MATLAB Numerical Programming | LLVM Instrumentation with CLang | AFL Fuzzying | Valgrind | Powershell, Batch, Bash | Git and Perforce | .NET, ASP.NET, .NET MAUI, and XAML | Algorithm & Database theory | Numerical Analysis | Theory of Computation | DevOps, Agile, Cl/CD | Differential Equations | Unit, Coverage, and Mutation Testing | Genetic Algorithm and Neural Network AI | Unity and Mono C# | Visual Studio Tools and Azure | Program Analysis with Control Flow and Pointer | SQL databases | Berkley Sockets | HTML, CSS