

Derek Parker

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Summary:

Computer Science Major with a strong troubleshooting background in computer software. Skilled in optimizing and programming, with hands on experience with various programming languages. Experienced in using data structures and algorithms. Continuously seeking opportunities to enhance knowledge and skills in software.

Education:

Western Washington University | 2022-2025

- Computer Science Major (Data Structures & Computer Systems I)
- Math Minor (Elementary Linear Algebra, Statistics, Calculus 1 & 2)
- Whatcom Coders Club

South Puget Sound Community College | Associates Degree 2020-2022

- Running Start (Object-Oriented Programming I and II)

Experience:

Waivers/Turn Worker | The Ridge Motorsports Park, 2021

- Welcomed and checked in over 500 members annually, ensuring a seamless registration process and providing exceptional customer service
- Demonstrated diverse communication skills by interacting effectively with racing teams, spectators, partners, and teammates to ensure successful execution of multiple events

Projects:

Personal Portfolio | HTML, CSS, JavaScript

- Developed an interactive personal portfolio website utilizing HTML, CSS, and JavaScript, resulting in a visually appealing and user-friendly interface.
- Optimized website performance by implementing responsive design principles, resulting in a mobile-friendly experience for users on various devices.

Blood Donation Management System | MySQL

- Developed a comprehensive SQL database for storing and querying medical patient information, including fields for the patient's name, unique ID, blood type, medical history, and phone number.
- Implemented data cleansing techniques to ensure accurate and reliable information in the SQL database

Code Vulnerability | Assembly/C

- Analyzed and identified potential security vulnerabilities in program code
- Utilized advanced debugging tools such as gdb and objdump to identify buffer overflow issues
- Implemented secure coding practices, reducing vulnerability risk by 75% and ensuring compliance with industry standards.

Rebuilt NASA's APOD | Java

- Developed and implemented a Java application using NASA API's to display the photo of the day with a gui
- Developed and executed a comprehensive testing plan for the Java application, resulting in a 100% bug-free release and increased user satisfaction.
- Utilized technologies such as HttpURLConnection and Gson for API communication and JSON parsing.

Skills:

- Spearheaded collaborative projects with a team of developers to design and implement software programs using various programming languages, resulting in a 20% reduction in application loading times and a 15% increase in overall system performance
- Utilized data-driven approaches to analyze complex software issues, identifying critical bottlenecks and implementing optimized solutions
- Proficient in designing and implementing data structures and algorithms to optimize application performance by 90% and solve complex coding challenges.