Benjamin Tate

www.linkedin.com/in/benjamin-s-tate | github.com/BenT165/ProgrammingProjects

EDUCATION

George Mason University | **Fairfax, VA**

B.S. in Computer Science | GPA: 3.5/4.0 **May 2024**

Dean's List: Fall 2022, Spring 2023, Fall 2024

Relevant Courses: Data Structures, Algorithm Analysis, Databases, Data Mining, Systems Programming, Operating Systems

TECHNICAL SKILLS

Programming Languages: Java | JavaScript | Python | C | SQL | CSS | HTML | Go | MatLab
Applications: Microsoft Visual Studio, git, vim/vi, Microsoft Excel, Docker, Android Studio
Libraries: Pandas, Scikit-Learn, Tensorflow, Keras, NumPy, Matplotlib

PROJECTS

MapReduce
- Designed a Go-based distributed framework inspired by Google's model to rapidly process data sets
- Utilized parallel processing and multithreading to reduce runtime by 3x
- Implemented system resilience and fault tolerance mechanisms, with a focus on scalability and performance

DNS Client
- Modeled DNS protocol to contact servers for designated website using Python
- Decoded IP addresses of servers from HTTP response to be displayed on screen

Linux Shell
- Designed framework in C to manage concurrent processes, track program execution, handle file redirection, and compartmentalize essential process information
- Built Task Manager system shell capable of executing standard Linux commands and interactive built-in commands

PROFESSIONAL EXPERIENCE

Systems Programming Teaching Assistant | **George Mason University** | **Fairfax, VA** **Aug 2023 - Present**
- Provided leadership and guidance for students in solving their problems related to assembly language, data types on embedded systems, Linux system calls, virtual memory, and concurrency in C
- Collaborated with students and instructors to administer online resources and conceptualize course material in a dynamic and accessible format

Data Structures Teaching Assistant | **George Mason University** | **Fairfax, VA** **Jan 2023 - May 2023**
- Served as liaison between students and educators to enhance documentation for projects utilizing dynamic arrays, linked lists, tree structures, and graphs in Java
- Mentored over 50 students in implementing data structures and object-oriented programming techniques, empowering them to develop better programming habits
- Assessed students' understanding of course concepts and project specifications to coach aptitude for compartmentalizing large projects

Chipotle | **Team Member** | **McLean, VA** **Apr 2021 - Aug 2021**
- Collaborated with a dynamic team to maintain high-quality service standards and create a positive customer experience