Spencer Bone

spencerbone99@gmail.com | (703) 505-4379
https://sbomb100.github.io/spencerbone.github.io
M.Eng. in CS | Blacksburg, VA

SKILLS AND TOOLS

Certifications: ServiceNow CSA, ServiceNow CAD
Languages: Java, C, Python, Kotlin, JavaScript, Haskell, Ruby, mySQL
Tools: GitHub, Android Development Studio, Wireshark, Figma
Skills: App Development, OS, Full-stack, Testing, Databases

PROJECTS

EnQueue – Website for Student Management for TAs   January 2025–May 2025
- Designed and developed a real-time queue management platform integrating FAQ systems and live student/TA interactions, reducing queue redundancy and improving TA assignment targeting.
- Implemented WebSocket-based live queue updates and Canvas API integration for dynamic course data synchronization.
- Built user authentication and role-based access with OAuth2 and JWT, supporting TA/student ratings, and live interactive in-queue engagement features.
- Tech Stack: FastAPI, PostgreSQL, React, WebSockets, OAuth2, JWT, Canvas API.

Book-E – React Bookstore Website   August 2024 – December 2024
- Leveraged Figma, CSS, and HTML to craft intuitive design frameworks and visually appealing layouts.
- Engineered advanced front-end functionality by programming from scratch with JavaScript, React, and React Hooks, transforming designs into dynamic, user-centric interfaces featuring sophisticated interactions, including animations and seamless cart management.
- Designed and managed database structures using MySQL and DAO Patterns

PintOS – Updating a Basic OS   January 2024–May 2024
- Initially starting with adding process scheduling, implementing system calls, advancing the file system, where my main was contribution being the implementation of a secondary page table and managing frame/page usage.
- Bolstered by the utilization of multiple threads to execute a single process (as initially it was threads could only run single processes) allowing for parallel computation, cutting down on execution time.
- Process Scheduling entailed making a timer for threads and CPU balancing between processors to reduce idle times of executing threads. Implementing system calls involved putting the call's arguments on a child processes stack and taking those arguments to execute specific system calls.

EXPERIENCE

ServiceNow Consultant Intern   *Woodbridge, VA (Remote)*
IntegrityPro Consulting   *May 2025–September 2025*
- Underwent training in the ServiceNow platform, earning the Certified System Administrator (CSA) and Certified Application Developer (CAD)
- Utilized AngularJS and JavaScript for ServiceNow instance customization

Teacher's Assistant   *Virginia Tech, VA*
CS3304 Comparative Languages, CS Java Bridge Program, Android Development   *August 2023–May 2025*
- Guided students in adapting to and learning various programming languages, including Pascal, C++, PROLOG, Golang, Scala, Haskell, and Ruby. As well as Java programming fundamentals and utilizing android studio to create apps from scratch.
- Taught key concepts such as functional programming, parse trees, interpreters, and advanced recursion, using languages suited to each paradigm (e.g., Scala for functional programming), OOP, and app development.

EDUCATION

Virginia Polytechnic Institute and State University (Virginia Tech)   *Blacksburg, VA*
Masters of Engineering, Concentrations: Software Engineering/Networking   *August 2024–May 2025*
Cumulative GPA: 3.97 / 4.00

Virginia Polytechnic Institute and State University (Virginia Tech)   *Blacksburg, VA*
Bachelor of Engineering in Computer Science, Minor in Economics and Mathematics   *August 2020-May 2024*
Cumulative GPA: 3.73 / 4.00