Anika Bookout

SKILLS

Languages: C++, JavaScript, C#, Java

Collaboration Tools: Git, GitHub, Jira

Software Testing: Catch2, JUnit, GDB, visual debuggers

Operating Systems: Linux, Windows

Methodologies: Agile, Scrum, Design Thinking

EDUCATION

Bachelor of Software Engineering, 4th Year

University of Victoria

Victoria, BC Sept 2020 – Present

WORK EXPERIENCE

Apprentice Garage Member (Co-op)

INSPIRE: STEM For Social Impact

May 2022 - Aug 2022

- Led frontend development using React Native. Collaborated with the backend lead to design an effective API
- Delivered presentations to key stakeholders, including industry mentors and program sponsors
- Gathered requirements directly from the end user, closely following the Agile methodology. Hosted workshops to gather ideas and feedback
- Facilitated daily standup meetings and took consistent minutes

Full-Stack Web Developer (Co-op)

SEGAL Lab, University of Victoria

Jan 2021 – Apr 2021 & Sept 2021 – Dec 2021

- Using React/JavaScript: designed, implemented, and integrated a real-time messaging service with Socket.IO
- Implemented a secure administrator dashboard allowing the development team to view site analytics and manage user data
- Implemented automated tests and wrote extensive documentation, both in-code and external

PROJECTS

NES Emulator (C++)

Aug 2023

- Worked with a team of three classmates to create a simplified emulator for the Nintendo Entertainment System
- Took the lead in designing and integrating the Picture Processing Unit (PPU) component
- Collaborated on integration tests to make sure all parts of the emulator worked together smoothly

Real-Time Particle-Based Fire Simulator (C#, HLSL)

Apr 2022

- Performs fluid simulation in real-time, creating a candle flame which moves realistically
- Hardware-accelerated computation done using an HLSL compute shader
- Extensively used research papers to analyze existing work in real-time fluid simulation