Sepehr Borji

Coquitlam, B.C · 604-710-7461 · Sepehr_borji@sfu.ca · LinkedIn · GitHub · **www.SepehrBorji.com**

Skills

- Languages: C/C++/C#, MATLAB, Python
- Software/Tools: Unity, Git/Github, FPGA
- Soft Skills: Communication, Adaptability, Problem-solving

Professional Experience

Programming Instructor | Coquitlam School District 43 (SD43) SEPTEMBER 2023 – APRIL 2024

- Developed engaging lesson plans, projects, and assessments to promote an immersive, hands-on learning environment
- Managed a hybrid teaching model by balancing in-person and virtual classes, utilizing recorded lectures, and implementing collaborative coding platforms like Git for version control
- Delivered comprehensive instruction in Unity, C#, and foundational computer science concepts such as algorithms, object-oriented programming, and game development workflows

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Volunteer Experience

President of Game Developers Club | Simon Fraser University SEPTEMBER 2024 – PRESENT

- Coordinated and oversaw 5+ Unity game development workshops for groups of 30+ attendees, guiding beginners through the end-to-end process of creating their first 2D and 3D games, resulting in 30+ completed prototypes per workshop
- Organized and Spearheaded social events, including icebreakers every semester, weekly collaborative game design meetups, 2 game jams, and monthly development meetups, resulting in 40-60 member-made games per year
- Grew club membership by 20+ new members a semester to grow our community

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Technical Projects

Real-Time Communicator| C/C++, Xilinx, UART| Embedded and Real-time System Software DECEMBER 2024

- Deployed a Linux image on the ZedBoard to unlock its UART serial port, enabling seamless device-to-PC communication
- Developed a multi-threaded C++ application using the Y-Modem protocol, achieving reliable file transfers between the board and host with zero data loss
- Illustrated all protocol steps with clear UML diagrams, cutting development confusion and accelerating debugging
- Performed hands-on end-to-end testing via a PC terminal and hardware tools, uncovering and fixing edge-case issues to ensure rock-solid performance

Digital Logic Vending Machine | VHDL, FPGA | Digital Logic and Design DECEMBER 2021

- Leveraged concepts in digital logic and design such as encoders, decoders, clocks, and finite state machines to relay information, track states, and synchronize operations
- Developed test benches to analyze component logic and system behaviour to validate our design and implementation

Graduate Student Admission System | C++ | ENSC 251 – Software Design and Analysis DECEMBER 2021

- Engineered a robust system to streamline the graduate school admission process by automating applicant ranking based on test scores and additional evaluation criteria.
- Utilized Object-Oriented Programming (OOP) principles to design reusable components for effective data representation
- Developed unit tests, implemented error-checking mechanisms, and incorporated exception handling to enhance program reliability and robustness

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Education

Bachelor of Applied Science - Computer Engineering | Simon Fraser University SEPTEMBER 2021 – APRIL 2026