Brody Silva

brody.silva@mymail.champlain.edu | linkedin.com/in/brody-silva | brodysilva.com

Education

Champlain College | ***B.S. in Game Programming*** Burlington, VT
Minors in Computer Science and Mathematics Expected Graduation: May 2027

Skills

Languages: C++, C, C#, Python, SQL, Java, HTML, JavaScript
Tools and Software: Unreal, Unity, Git, GitHub, SVN, OpenGL
Certifications: Certified ScrumMaster from the Scrum Alliance
Awards: Ubisoft GameLabs 2026 - Best Quality of 3C's, Best Art Direction and Production ($10,000)

Experience

Software Engineer Intern | *Simmonds Precision Products* May 2026 – August 2026

- Engineered a minimal hardware emulation layer, enabling an internal test suite to run on consumer hardware ($77) instead of proprietary machines ($150k), dramatically increasing testing throughput.
- Developed Python tools backed by SQLite to streamline build pipelines and deployment for testing software.
- Collaborated on an agile team across C++, Python, and embedded C codebases, using Git to manage branches, resolve conflicts, and ensure stability.

Unity Engineer Teaching Assistant (Summer) | *Champlain College* June 2025 – July 2025

- Taught gameplay implementation, C# scripting, programming principles, and software architecture.
- Guided students through architecting projects, maintaining clean code, and iterative development.

Game Programming Tutor | *Champlain College* September 2024 – Present

- Tutored peers in gameplay programming, AI systems, game architecture, and tool creation in C++ and C#.
- Helped peers design, debug, and iterate on gameplay systems and programming assignments.

Projects

GATTAI | *Unity (3D)*

- Built gameplay systems in C# for a cooperative on-rails shooter, including player controls, camera, shooting, and unique abilities, over 10 weeks on an 8 person scrum team.
- Created an enemy configuration workflow that let designers build encounters without code changes.
- Won Best Quality of 3C's (Character, camera, controls) and 1 other ward, plus 6 nominations, among 24 teams at Ubisoft GameLabs 2026.

Bee Darts | *Unity (3D)*

- Implemented and polished short, responsive player interactions with a focus on game feel.
- Designed and implemented a procedural hex-grid map framework in C# that supports flexible and reconfigurable gameplay spaces.
- Built Unity editor tools for hex-map editing, dartboard creation, and rapid interaction testing.

3D Maze Generation | *C++, OpenGL*

- Designed and implemented a procedural geometry pipeline in C++ that converts 2D layouts into fully navigable 3D levels rendered with OpenGL.
- Created a dynamic mesh generation system with vertex sharing and geometry deduplication, reducing memory usage and improving rendering performance.

Interests

- President of the Champlain Volleyball Club and Vice President of the Champlain Rock Climbing Club.
- Avid runner, gym-goer, world-traveler, retro video-game collecting, Rubik's cubes, and dogs.