Berk Unver

Prospective Game Programmer

Github	LinkedIn	Email	Phone
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I am a senior at Boston College. I am very independently-driven and am interested in systems programming. I want to become more involved in low-level programming and designing unique and worthwhile games.

Education

Boston College, BS in Computer Science and minor in Studio Art, expected graduation in May 2025.
Notable coursework includes Compilers, Computer Systems, Operating Systems, Cryptography, Networks, Deep Learning, and a Functional Programming independent research project.

Relevant Work Experience

Thekla Inc.   May - Aug. 2024
Game Engine Programming Intern
I worked on Thekla's custom game engine in their custom, native, manual memory management language, Jai.
- Added new widgets to the level editor
- Made the controller and keyboard rebinding menu.
- New gameplay entities and UI
- Fixed many editor and gameplay bugs

VideaHealth   May - Aug. 2023
Software Engineering Intern
I worked on the backend and frontend of their main product.
- Parallelized unit testing
- Improved dental X-ray sorting algorithm
- Front-end bug fixes
- Reviewed pull requests

Boston College TA   Jan. - Dec. 2023
Computer Systems Teaching Assistant
I enjoyed Computer Systems when I took it so I became a TA.
- Held office hours
- Explained intro systems topics from class to students
- Left detailed feedback when grading student assignments

Personal Projects

The Knight's Layer   Dec. 2023 - May 2024
https://youtu.be/ZiG4rueYiJA
This is a Deltarune fangame and parody.
- Written in C-style C++ with Raylib, GLSL shader
- Replicates all of the features of the Deltarune battle system (magic and ACTS, items, bullet hell patterns, dialog, SPARE and MERCY endings, etc.)
- Custom boss with 6 attack patterns

Compiler Frontend   Feb. - May 2023
https://github.com/BerkUnver/Creed
I wrote the lexer, parser, and typechecker for the group project of my Compilers course.
- Written in C from scratch, no parser generators. The only dependency is libc.
- Implements the syntax of a C-like programming language.

Stealth Sokoban Game   Jan. 2025 - Present
https://github.com/BerkUnver/StealthSokoban
A work-in-progress 3D puzzle game.
- No game engine, minimal set of dependencies
- Calls directly into OpenGL and WinAPI
- Written in Jai. (Manual memory management, natively compiled.)

WASM Interpreter   Sep. - Dec. 2022
https://github.com/BerkUnver/Zapper
Functional programming project for independent study course credit.
- Written in Elm.
- Supports a subset of Web Assembly
- Lexer, parser, typechekcer, and intepreter

Untitled Action Game   Dec. 2020 - June 2024
I spent three and a half years trying to make the game I most wanted to make. I stopped after realizing that this project was hampering my evolution as a game developer.
- Written in C# with Godot Game Engine. Custom tooling in C: https://github.com/BerkUnver/CombatAnimator
- Though this project is cancelled, it isn't a failure. This is what made me interested in game development. I will return to a very different version of this in the future.

Art Projects   Dec. 2020 - Present
https://BerkUnver.github.io/Portfolio.pdf
Assorted art projects both relating to and outside of my game projects.
- Independent Study in Figure Drawing
- Sprites and animation for *The Knight's Layer*
- Sprites and animation for my untitled action game
- Pencil and paper traditional animation
- Portraits