

David Erbeling
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Portfolio: erbeling.github.io

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Skills:

Languages: C++, C#, Java, Lua, HTML, CSS, Javascript

API/Tools: OpenGL, DirectX, Unity, MonoGame, Git, Visual Studio, Excel

Other: Game Design, Level Design, UX Design

Projects:

Hatchit, Game Engine: Lead Engineer

- Designed engine API around customizable graphics pipelines with DirectX12 and Vulkan
- Wrote JSON file specifications for implementation generic graphics resources
- Created systems to efficiently load resources and track asset dependencies
- Wrote an accelerated math library with SSE2 for the engine

Mineshaft Mayhem, Endless Runner: Gameplay/Graphics Engineer

- Wrote scene and object loading code to import assets from XML files
- Integrated Lua scripting into the engine and used it to write most of the game logic
- Created shaders for mind bending visual effects with deferred shading
- Added gamepad support with SDL2

Soul Bound, Tactical RPG: Lead Engineer

- Organized and supported engineering team members
- Implemented and adjusted character movement and camera controls
- Created basic tools to help make the level design process more efficient
- Generated Fog-of-War effect in levels with customized shader code
- Designed and balanced core combat systems and AI
- Integrated Lua scripting systems for dialog, quests, and spells
- Implemented persistent save state to track quests and player progress through the game

Education:

Rochester Institute of Technology	Dec 2016
Game Design and Development BS	3.8 GPA

Employment History:

Research Assistant (Atlas)	Aug 2016 – Dec 2016
Wrote C++ and Graphics code demos	
Developed front-end for website	
Teaching Assistant (Level Design & 2D Animation)	Sept 2015 – May 2016
Helped students with lab computers/software	
Critiqued and Graded homework assignments and projects	