

PHILIP RIDEOUT

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San Jose, CA

I have always been fascinated by GPUs, graphics, and deep learning. Over the years I've worked on shader compilers, OpenGL drivers, shading & lighting tools, performance & debugging tools, rendering libraries, and graphics-intensive web applications.

My hobbies include windsurfing and indie game development. In the late 90's I made a platformer called **Noop's Odyssey** and occasionally still get fan mail about it. More recently I created the puzzle game **Blockdown** for Steam.

EXPERIENCE

Chief Technology Officer, Arcol Technology — 2022-Present

Building a collaborative CAD application for architects. Pushing on technologies like WebAssembly, WebGL / WebGPU, and Rust.

Senior Software Engineer, Google — 2016-2022

Designed, implemented, and maintained the Vulkan and WebGL backends for Filament, Google's physically based rendering engine, written in C++.

Also worked on Daydream VR technology in my first two years at Google.

Research Engineer, Pixar Animation Studios — 2011-2014

Maintained tools and pipeline for shading artists. Developed GPU-accelerated lighting tools. Credited in *Brave* and *Monsters University*.

Senior Tools Engineer, NVIDIA Corporation — 2005-2010

Designed and implemented PerfHUD ES, a cross-platform performance analysis and debugging tool for OpenGL ES.

OpenGL Driver Developer, 3DLabs — 2000-2005

Developed the industry's first GLSL vertex shader compiler. Authored various graphics-related tools and demos. Maintained the VLIW microcode for vertex processing in Wildcat GPUs.

SKILLS

C++, OpenGL, Vulkan, Rust, WebGL, React, TypeScript.
GPU optimization, Real-time rendering, Path tracing, Geometry processing.

PUBLICATIONS

I wrote *iPhone 3D Programming*, which I believe is the first book ever written about 3D graphics for mobile devices. I've also contributed chapters to various graphics books such as *WebGL Insights* and *OpenGL Insights*.

EDUCATION

Mississippi State University, Bachelor of Science. Summa Cum Laude.