Justin Meiners

software engineer

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https://github.com/justinmeiners

I combine strong computer science fundamentals with an ability to make effective design and leadership decisions. I have a history of bringing projects from start to finish, in collaboration with customers. I believe planning is essential to creating great software.

Skills

subjects: computer graphics, 3D math, Linux systems, databases, numerical methods, generic programming

primary tools: C, C++, JavaScript, Common Lisp, Swift, Bash, STL, Git, make, Node.js, OpenGL, WebGL, GLSL, HTML5 canvas, SQLite, Sphinx

additional tools: C#, Java, Python, Objective-C, TypeScript, Haskell (even professionally!), PostgreSQL, Docker, Cocoa, Unity3D, ARKit, Android, Django, Motif, V8, SQL, gnuplot, HTML, CSS

Experience

AR/VR Software Engineer - Apple Nov 2022 - Current
Technology Development Group (TDG) working on system applications.

Software Engineer - PassiveLogic Mar 2021 - Nov 2022
Mobile team lead. Invented software for scanning buildings in AR and automatically extracting floor plans from 3D models (5 patents pending). Extensive work in mesh processing, computer vision, and numerical methods. Optimized algorithms for Apple platforms using frameworks such as Accelerate, LAPACK, simd, Metal.

Software Engineer (Contract) - Independent Jul 2019 - Mar 2021
Helped other development teams overcome challenging technical problems. Updated a legacy WebGL application to use modern rendering techniques (Zygote Media). Created iOS and Android apps to talk with custom bluetooth hardware (Brower Timing). Wrote an equipment rental website and search engine in Django (Enigma3). Designed a system that watches sporting events and asks viewers engagement questions (Opine).

Software Engineer/Engineering Manager - Pyrofex Corporation May 2018 - Jul 2019
Developed large-scale linux web applications with a team of internet and cryptography experts. Mix of management and development work on several projects including: an aggregator of cryptocurrency market data, a distributed IDE for writing smart contracts, and an alternative JavaScript runtime emphasizing security.

VR Developer - Heizenrader Sep 2016 - May 2018
Created virtual reality simulations of medical surgeries for Vive, HoloLens, etc). Focused especially on problems involving shaders and 3D math. Significant involvement in project planning and sales.

Mobile and Web Developer - Various Feb 2009 - Sep 2016

I held various development positions with small businesses and local government, alternating between part-time and full-time throughout the school year. This experience is where I learned to develop software professionally. Highlight: Personally programmed more than 25 iOS apps for medical device manufacturers, including Fortune 500 companies.

Education

M.S Mathematics - Brigham Young University 2019-2021
GPA: 4.0. Studied 3D space (and higher dimensions) including geometry and topology. Thesis: *Computing the Rank of Braids.*

B.S Mathematics - Utah Valley University 2015-2018
GPA: 3.88. Minor: Philosophy.