

Morgan Davis

Santa Cruz, CA

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OVERVIEW

I'm a software generalist and a multi-platform expert. My hobby is Computer Graphics / OpenGL / Realtime Rendering.

EXPERIENCE

Principal Software Engineer, Turtle Beach Inc., San Jose, CA — Feb 2020 – Present

Leading software development across products and platforms.

- Owning software development
- Writing various code for iOS/Android/Windows/macOS
- Working closely with engineering and product management stakeholders

Software Development Consultant, Turtle Beach Inc., San Jose, CA — Jun 2018 - Feb 2020

Providing technical expertise and code contribution for multiple successful product launches.

- Advising as a technical expert
- Writing code in Objective-C for iOS/macOS, C#/C++ for Windows
- Working closely with CTO & Firmware Manager to deliver multiple successful product launches

Senior Software Engineer, R&D, Plantronics Inc., Santa Cruz, CA — Oct 2016 - Jun 2018

Leading software development for pilot programs and core technology exploration. I acted as a technical hero&ambassador for the company -- performing internal and external technology demos and sponsoring hackathons.

- Working with IoT devices/communication protocols/multi-factor authentication/Bluetooth/Ultra wideband
- Writing code in Objective-C/Swift for iOS/macOS, C++ for Linux, Python

Software Engineer, Innovation, Plantronics Inc., Santa Cruz, CA — Oct 2012 - Oct 2016

Developing software for a small, multidisciplinary team exploring new ideas and technologies. The Innovation Team did things that were outside the comfort zone of the company as a whole -- we created many conceptual prototypes, strategic partner integrations, and early product iterations. I used a breadth of technologies and programming languages on an almost daily basis.

- Working with IoT devices, communication protocols, Bluetooth, sensors
- Writing code in Objective-C/Swift for iOS/macOS, Java for Android

Software Engineer, AOptix Technologies Inc., Campbell, CA — Jul 2011 - Oct 2012

Developing middleware, front-end, and core algorithm porting and optimization for the world's first iPhone-based iris and fingerprint recognition platform (MFi accessory). I ported many image processing algorithms from C++/Linux to iOS environment, used CoreImage and OpenCV to provide real-time iris & face finding functionality, and specified & implemented the 30-pin MFi serial communication protocol. I also created and skinned the native iOS app interface, and designed and implemented several manufacturing configuration/calibration tools. Mathematics and knowledge of optical physics were used frequently.

- Working with OpenCV, CoreImage, communication protocols
- Writing code in Objective-C/C++ for iOS
- Porting and optimizing image processing algorithms

Founder, MKD Software LLC, Placerville/Santa Cruz, CA — Jun 2001 - Jul 2011

Developing free and shareware applications for the macOS platform. Several of my titles saw widespread popularity, including some achieving several hundred-thousand downloads and thousands of registered users. All operations were performed by myself including: application design and development, web and backend development, sales and marketing, and customer relations and support.

- Objective-C/C/Cocoa/Carbon for macOS
- PHP/MySQL/CSS/HTML

EDUCATION

B.S. Computer Science, 2011 – University of California, Santa Cruz

ENUMERATED SKILLS

- Mathematics and Computer Science theory
- OpenGL and Computer Graphics
- Cross-platform C++ development
- Objective-C and Swift development
- C#, .NET, and Xamarin development
- Linux, networking, and infrastructure systems
- Enough Python to be dangerous

EXTRACURRICULAR

- Developing a home-grown, cross-platform game engine
- Endless Raspberry Pi projects
- Downloading NOAA weather satellite images in my attic
- A home IT infrastructure that rivals many small businesses
- Tuning and track'n a 400rwhp rotary RX-7