

Zach Bernal, Computer Engineer

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SUMMARY

A multi-disciplinary computer engineer based in Silicon Valley

EXPERIENCE

VitalConnect, Inc., Software Engineer

2013-12-02 — Present

<http://www.vitalconnect.com/>

- VCI is a medical device startup developing a heartrate monitoring patch. Developed new features across embedded, iOS, Android, Linux and Windows platforms.
- Gained experience working with multiple tight-knit engineering teams in a dynamic startup environment
- Unified efforts across teams and projects, and gained a deep understanding of integration between firmware, software and mobile code
- Managed software releases for internal cross-team libraries
- Maintained firmware supporting sensors on our medical device, software for our embedded data relay, firmware for our internal test boards, and mobile applications on iOS and Android
- Converted our source code repositories from SVN to Git

SuccessFactors, Inc. (SAP Cloud), Security Consultant

2013-07-01 — 2013-11-01

<https://www.successfactors.com/>

- SuccessFactors was a leader in BizX in the cloud, focused on security and compliance. Maintained network monitoring infrastructure and helped automate the creation of audit reports.
- Administrated the Tripwire 7.5 and 8.2 and RSA 6.1, 7.1 and 8.0 consoles
- Spearheaded the upgrade to Tripwire 8.2 and RSA 8.0
- Prepared audit-ready reports on our security infrastructure
- Handled penetration tests and remediation of discovered issues

Zoran Inc. (acquired by CSR), Firmware Engineer

2010-03-01 — 2013-01-01

https://en.wikipedia.org/wiki/Zoran_Corporation

- Zoran was an industry leader in System-On-A-Chip silicon for digital cameras. Supported and enhanced legacy features for their embedded devices in a C/C++/ThreadX RTOS/MIPS Assembly environment.
- Refactored critical image processing hardware driver interfaces to improve code cleanliness and ease of access for applications developers. Proliferated the use of TDD in the development of new features.
- Integrated dual-sensor recording features and bugfixes from older customer branches to mainline to prevent duplication of efforts and to get projects in new markets to release on time
- Worked face-to-face with customer developers to solve critical release-blocking issues for a wide variety of overseas customers in Japan, Taiwan, China, and South Korea
- Developed high-level flow code, critical hardware driver interfaces, and added features to low-level ThreadX operating system calls

EDUCATION

University of California, Santa Cruz

2005-08-01 — 2009-12-01

Bachelor - Computer Engineering, GPA: 4.0

- CMPE 118 - Introduction to Mechatronics
- CMPE 123 - Computer Engineering Design Project

SKILLS

Firmware (Master): Embedded C, Mips Assembly, Signal Processing, ThreadX OS

Mobile (Proficient): iOS, Android

Devops (Proficient): Jenkins, Build & Release, Git, SVN

Software Polyglot (Proficient): C#, C++, Objective C, C#, Java, Python
