

Al Piepho

3635 Copper Spring Dr | Ft. Collins Colorado 80528 | 970 231 6982 | alpiepho@gmail.com
<https://www.linkedin.com/in/al-piepho-fw-sw-engineer>



Software | Firmware | Embedded Systems | Web Development

- 15+ years developing and debugging Software for highly constrained Embedded Systems
- Recently expanded those skills toward Web development and Full Stack systems
- Very strong in numerous languages, most recently HTML, CSS, Javascript
- Demonstrated ability to ramp up on existing systems and contribute quickly.
- 20+ projects for Lynda.com and FreeCodeCamp courses over past 6 months
- Projects deployed on host servers such as Github, Heroku, and AWS
- A self starter who welcomes the chance to own the difficult problems
- Continually looking to be the “force multiplier” that makes my team more effective
- Recognized by co-workers for innovation, productivity and results

Skills

Programming Languages: HTML, JavaScript, CSS, Ruby, C, C++, C#, Asm, Java, various Scripting

Programming Frameworks: Node.js, Express.js, MongoDB, jQuery, React.js, Angular.js

SW Development Tools: Git (Bitbucket, GitHub), Atom, Sublime, Visual Studio Code, Eclipse, Postman

FW Development Tools: Various emulators, various HW scopes

Testing Frameworks: Selenium, Jenkins

Protocols and Standards: JSON, REST, XML, USB, SCSI, CD-R/RW, DVD

Computer Operating System Internals: Mac, Linux, Windows

Work History

Individual Training, Northern Colorado

April 2017-present

- Took advantage of an opportunity to sharpen development skills
- Focus on rapidly changing landscape of Web development and Full-Stack systems
- Finished 200 hour freeCodeCamp Front-End Development certification in 26 days
- Completed 20+ Web training courses from LinkedIn/Linda.com in past 6 months
- Near completion of freeCodeCamp Back-End Development certification using packages like Node.js, Express.js, and MongoDB
- Near completion of 50 Day “CSS Challenge” to build complex web graphics with CSS only.
- Programming every day, with all work in git, specifically GitHub and Bitbucket
- Reading and listening to related Software and Web blogs/articles/podcasts to stay current
- See link for portfolio of all projects: <https://alpiepho.github.io/project-portfolio/>

Broadcom LTD (Avago Technologies), Northern Colorado

2013-2017

Senior Firmware Engineer

- Designed and implemented very low level, efficient FW for several SERDES (serialize/deserialize) ASICs used in very high speed computer interfaces such as Ethernet, SAS/SATA
- 3 years coding with Ruby, including complex area of marshaling to Native C as part of a test tool
- Tackled the tough problems, such as recovering memory, and improving existing debug tools

Schneider-Electric (Pelco), Northern Colorado

2008-2013

FW/SW Engineer

- Integrated third party video analytics SW into existing digital video camera, allowing competition in new market segment
- Several years as part of very successful Agile/Scrum development team

Hewlett-Packard Company, Northern Colorado

2001-2008

SW Engineer – Storage Works NAS Division

- Developed .Net and C# Application SW for Storage Management product. Ramped up quickly on new product and new SW language

FW Engineer - Consumer Imaging Products

- Developed FW for several digital cameras
- Local expert in key areas: performance and embedded code/memory usage
- Reduced effective camera boot time from 5 seconds to under 1 second.
- Designed SW simulator for DSP image processing engine of 2 competing ASICs, allowing direct porting of key algorithms between platforms

Lead SW Engineer - Consumer Entertainment Solutions

- Architect for exciting home entertainment product in a fast paced emerging product category
- Leveraged many existing and new Linux applications into one of first Internet appliances
- Saw product released to local Best Buy store shelf

Training

Front End Development Certification - FreeCodeCamp
29 Course Certifications - LinkedIn/Lynda.com

Education and Training

Bachelor of Science, Electrical Engineering - University of Colorado, Boulder CO
Bachelor of Science, Computer Science - Iowa State University, Ames IA

Awards

Author on 6 U.S. Patents, see LinkedIn page for more details

Web Technologies Portfolio

<https://alpiepho.github.io/project-portfolio/>

