Peter Froud
Santa Clara CA USA
https://froud.xyz

Employment History

Software Engineer, May 2017 – present

Lumenetix Inc, *acquired by ERP Power LLC in June 2019*

Scotts Valley, California, USA

- Sole author of company's current web-based data visualization suite for understanding complex test results
- Overhauled main production line test software
    - Simplified the test process
    - Removed bugs which could damage hardware
    - Significantly refactored code to improve serviceability
    - Improved interface usability
- Established next generation of product architecture
    - Collaborated with firmware engineer to refine procedure
    - New architecture allows customers mix and match hardware
- Re-wrote engineering user interface for debugging firmware and testing new features
    - New version is faster, more intuitive, and reduces mistakes
    - Flexible layout adapts to wide variety of tasks
- Traveled to overseas factory to set up and maintain new production line
    - Integrated software with modernized test equipment
    - Provide ongoing tech and manufacturing support
- Designed and implemented company-wide database of products and serial numbers
    - Consolidated data from multiple makeshift sources to replace legacy system
    - Analyzed user needs to guide beneficial solution
    - Features straightforward web-based user interface
- Redesigned secondary test system for a growing product line
    - Identified how to make it fully automated
    - Removed unnecessary hardware, software, and operator steps
    - Integrated resulting measurements into existing data infrastructure
- Organized test result storage topology to streamline data flow
- Developed interfaces with compiled libraries to interact with test & measurement instruments

- Wrote documentation, ranging from theory of operation to step-by-step instructions
- Responsible for resolving production line issues
- Wrote burn-in software to validate new release of product firmware
- Served as sole Lumenetix engineering representative at partner's facility
  - Also technical contact between companies
  - Partner is a large multinational business
- Oversaw transfer of on-site IT infrastructure between buildings, and later to the cloud

Self-Driving Car Project, Google Inc., Mountain View CA, June – September 2012

- Analyzed existing automotive media network, recorded functionality, and developed audio system for next iteration of vehicle
- Created parametric models of interior components using handheld 3D scanner
- Designed and built panels to conceal automotive computer for security and aesthetics
- Wrote thorough documentation of work, with focus on future contributors

Independent technical support business, April 2009 – April 2017

- Install, repair, and maintain hardware and software
- Consult with clients on best practices and provide step-by-step training
- Clients include individuals and small businesses

Education

Bachelor of Science in Computer Science, University of California, Santa Cruz, June 2017

Technical Proficiencies

Development:	Java, JavaScript, TypeScript, Python, C, Git, MySQL
Media & presentation:	LaTeX, Photoshop, Inkscape, DaVinci Resolve
Computer aided design:	Inventor, SolidWorks
Operating systems:	Windows, Unix-like, macOS