

DAVID CARY

CONTACT

918.813.2279

d.cary@ieee.org

4550 240th Place SE

Sammamish, WA 98029

SKILLS

Soft Skills – Enjoy

collaboration/mentoring, am comfortable w/pair programming/ teamwork. Presentation Skills, Sense of humor, Curious & Tenacious spirit, Self-driven

Custom Electronics Design – Tools for Identity Management and authorization, Client Server development

Electronics Prototyping – Circuit board design, KiCad, Altium DXP, Protel, soldering irons, Spice, oscilloscopes, multimeters and logic analyzers, wireless protocols – RAIN

Computer Programming – Includes use of Amazon Web Services (AWS), Software as a Service and as a Product, Python 3, Node.js, Google Apps Script, C, C++, JavaScript, CGI scripting, Microsoft Visual C++, Prolog, HTML, ARM, DSP 56002, 68000 80386, 68Hc22, Cypress PSoC, and Microchip PIC assembly, Linux

EDUCATION

Oklahoma State University

M.S. Electrical and Computer Engineering

B.S. Electrical and Computer Engineering with Honors

Mathematics Minor

National Merit Scholar

PROFESSIONAL AFFILIATIONS

Member: Institute of Electrical and Electronics Engineers

LANGUAGES

- English (native language)
- German (semi-proficient)
- Spanish (some)

SUMMARY OF EXPERTISE

- 10+ years of experience designing custom electronics and developing software across a wide variety of projects, able to quickly achieve expertise in new technologies/protocols/computer languages, consistent effective diagnosis and delivery of solutions
- Proficient at writing and debugging programming languages
- Possesses uncommon combination of demonstrated expertise in both software design/development, and hardware skills, including experience in crafting small electronic devices for the medical field
- Creative problem-solver: challenges assumptions, thrives on the challenge of seeing a need, conceptualizing, designing, developing and implementing innovative solutions, using hands-on process to problem-solve and ensure real-world application is effective/coherent
- Proven ability to effectively collaborate, communicate, and document processes with geographically distributed project teams and stakeholders; strong mentorship skills; values being a team player

WORK EXPERIENCE

Chief Software Developer

October 2017 to Present

Ocutrx

- Build prototype electronics for self-contained AR goggles headset
- Maintain documentation for a team of hardware & software developers

Electronics Engineer

2007, 2008, 2010 to Present

Carybros

- Set up a distributed system of over 100 cloud-based servers for CityVu.com
- Assemble hardware subsystems and programmed glue software for live, real-time HDTV/MPEG4 video-over-internet prototypes for Lamar Systems
- Design circuit boards for Global Safety Labs
- Design circuit board for Munnich Design

Electronics Engineer

2006

Tron-Tek

- Built prototypes and wrote firmware for handheld DTMF transmitter printed circuit board (PCB)
- Maintained and improved firmware for pan-tilt-zoom (PTZ) receiver

Previous Positions - Engineering / Research

- **Enduro PLS** (2005) – *Electronics Engineer* - Designed, tested, and repaired mixed-signal electronic printed circuit boards for Smart Pig
- **Dr. Paul Krautter** (2003-2005) – *Medical Electronics Engineer*
- **Lamar Systems** (2003) – *Vice President – and Integration Engineer*
- **MotorGuide Marine** (1999-2002) – *Product Design Eng.*
 - o Improved trolling motor power electronics to reduce net cost
 - o Designed electronics for five sonar display circuit boards
 - o Maintained embedded software in C / ARM assembly language
- **OSU Oklahoma Imaging Laboratory (with Lucent)** (1999-2002) – *Research Assistant* – Programmed automated infrared circuit board analysis applications
- **Sunset Laboratory, Inc.** (1992 – 1997) – *Electronic/Software Engineer*
 - o Developed software for EyeDentify retina scanner, including RS-485 network protocol
 - o Developed software for automatic air pollution measuring system (NIOSH Method 5040)