

## Engineering

- Analog and digital circuit design
- Embedded microprocessor firmware design
- 3D mechanical design
- Mobile software on iOS for iPhone/iPad
- Application software on LAMP and macOS
- Programming in C/C++, Swift
- Database design, validation, migrations
- Full-stack web development
- WordPress and Squarespace

## Quality

- GMP quality management systems (QMS)
- FDA 21 CFR 820 / ISO 13485 compliance
- ISO 14971 risk analysis, design controls
- FMEA, CAPA reviews, complaint management
- Agency-compliant procedure creation
- Lean, Certified Six Sigma Black Belt (CSSBB)

## Training

- Instructional design
- Knowledge base creation
- Technical writing and editing
- ON DEMAND Live training

## Business

- Product management
- Product structures and ERP
- Marketing and sales, direct and OEM
- Amazon Seller Central implementation

## Information Technology

- Outsourced IT management
- Network design and administration
- Security auditing

## Creative

- Photography - fine art and commercial
- Videography - studio and live production
- Photo editing and archival-quality framing
- Video editing and motion graphics creation
- Audio recording and production
- Voiceovers, voice talent
- Graphics and logo design

## Leadership

- ON DEMAND Project management
- ON DEMAND Engineering management
- ON DEMAND Mentorship and training

## Engineering Software

### ECAD / Electrical

- Autodesk Eagle for schematic/PCB layout

### MCAD / Mechanical

- Alibre Design Expert for 3D, plus 2D drawing

### Rendering / Visualization

- KeyShot CAD for 3D rendering

## Engineering Hardware

### Electronics lab

- Tektronix digital and analog oscilloscopes
- Saleae logic analyzer
- Total Phase protocol analyzer
- Fluke multimeters
- HP signal generators, bench power supplies
- PIC/SAM microprocessor modules

### Model Shop

- Metalworking - saws, arbor presses, drill press, wire forming, grinders, etc.
- Woodworking - saws, sanders, nailers, etc.

## Software Development

### Computers

- macOS workstations, Linux servers
- Windows 10 and legacy, via virtualization

### Mobile devices

- iOS devices - various models of iPhone, iPad, Apple Watch, Apple TV

### Registered Apple Developer

- macOS, iOS, iPadOS, watchOS, and tvOS

## Creative Software

### Adobe Creative Cloud

- Lightroom, Photoshop, Illustrator
- Premiere, After Effects for video production
- Audition for audio production
- Dreamweaver for web production
- InDesign, Acrobat for document production

### Apple

- Apple Final Cut Pro, Apple Motion, and Apple Compressor for video production
- Apple Logic Pro for audio production

### Legacy Support

- Vegas for video production
- SONAR for audio production

## Creative Hardware

- Multiple DSLR, mirrorless cameras, and lenses
- Professional compact cameras
- Professional video cameras
- GoPro action cameras; mounting options
- Studio lighting systems
- Video 'green screen' room (chroma keying)
- Multichannel digital audio interfaces

## Infrastructure

- Paid Notion, Slack, and Zoom accounts
- Private cloud server using Nextcloud
- LAMP stack; internal and Linode-hosted
- Virtualization using Parallels Desktop
- Business-class broadband Internet service