

C.J. Picklesimer, P.E.
cj@scalarelectronics.com
937-206-9992

Credentials

B.S. in Computer Engineering, Rose-Hulman Institute of Technology
P.E. in Electronics and Electrical Engineering, TX#115959

Experience

iStrategyLabs, Washington, DC

Jan '16 - Jan '17

<https://isl.co>

Director of Hardware

- Direct manager of 5-person multidisciplinary (ID/ME/EE/SW) "Hardware" team
- Provide engineering & design guidance for client campaigns, working closely with project management and strategists. Notables: [VW Rival Road](#) & [Lockheed Mars Bus](#)
- Facilitate team technical growth through mentorship, cross-training, external training
- Maintain and grow internal fabrication workshop; evaluate and justify tool, service, and consumable expenses
- De-facto Chief Engineer for hardware/product development efforts
- Self-directed training in necessary secondary skills, e.g. MCAD (AutoDesk) & CAM/Fab (3D Printing, Laser & Router CNCs, Thermoforming, Molding)
- Led internal & external engineering outreach; company-wide electronics workshops, mentorship at community STEM high schools, internal training seminars, etc

SCALAR Electronics, Washington, DC

July '14 - Present

<http://www.scalarelectronics.com>

Founder & Sole Proprietor

- Turnkey electronics design and product development consultancy
- Specialized in expanding capabilities & offerings of existing, non-EE design groups
- OEM/R&D clients include Samsung Smart Things Innovation Lab, MIT Media Lab Camera Culture Group, GE Appliances Division, BSX Athletics
- Product Development clients include Mixer Design Group, Pump Studios, Loophole, Evocativo, Pushstart Creative, iStrategyLabs
- Responsible for all engineering, procurement, accounting, marketing, branding, business development
- Developed and launched designer-focused prototyping tool Lumimoto, just for fun
- \$78k in contract billings in first 12-month period (July '14 - June '15)

Supermechanical, Austin, TX

Nov '13 - Aug '14

<http://supermechanical.com>

Chief Engineer & Operations Manager

- IoT consumer electronics startup with a 5-person design team
- Broad range of responsibilities including
 - Systems and electrical engineering for existing and new products
 - Management of product and software development team
 - Product development scheduling and timeline
 - Negotiation of supplier/manufacturer pricing and terms
 - Domestic and offshore manufacturing oversight
 - Business development and formation of strategic partnerships
 - Technical and promotional writing
 - Market analysis and business modeling

Ascendant Engineering Solutions, Austin, TX

June '09 - Nov '13

<http://www.aesaustin.com>

Electrical Engineer

- Contract-based 30-engineer firm; systems, mechanical, electrical, software engineering coverage
- Primary electronics designer for military, consumer, and industrial design contracts
- Typical design cycle consists of specification creation, architectural concept design, OrCAD schematic entry, Allegro/PADS layout and mechanical design, procurement, electrical testing/integration, and basic firmware/HDL (C/Verilog) development. Capable of completing entire design cycle or any subset.
- Broad electronics design experience, including:
 - **Wireless** (WiFi, BT, 6LoWPAN, Ultrasonic)
 - **Low-Power** (active/standby power modeling, battery-powered design, thermal)
 - **Audio/Video/Sensing** (noise reduction, mixed-signal, camera interfaces)
 - **Digital** (high-speed signal integrity, LVDS)
 - **Motion Control** (PID controllers, motor drivers, gimbal/pointing design)
 - **Power Systems** (Switched-mode and linear regulation design and simulation)
 - **DFM** (accurate PCB size estimation, layer reduction, BOM minimization)
 - **DFT** (supplemental test hardware design, test planning)
 - **Integration** (power/thermal measurements, debugging, rework, etc)
- Routinely complete high-density multilayer (up to 14 layer) designs with good yields and minimal electrical debug/rework required.
- Work closely with software and mechanical engineers on multidisciplinary teams throughout electronics design cycle