

WORK EXPERIENCE

PV Powered / Advanced Energy May 2006 – Present

ELECTRICAL ENGINEER II

Solar inverter company founded in Bend, OR 2004

- Ω Major contributions to the design of seven inverters, from 30kW up to 1MW, with sustaining engineering for each
- Ω Regularly perform design qualification at the board level, sub-system level, system level, and own documentation
- Ω Power-Management electronics analysis, design, and qualification at a PCB level (multiple PCB card-cage designs) and a system level (up to 17 PCB's and 5 power supplies sharing a power source)
- Ω High voltage (2kV) electronics design with complex clearance requirements
- Ω Specification of simple and complex IC's, followed by library management and component creation for CAD
- Ω IGBT gate-drive electronics design, including hardware protection schemes
- Ω Application of design principles for manufacturability, reliability, and serviceability
- Ω Creation of system guides for interdepartmental use, audience ranging from non- to very technical
- Ω Aid the technical support staff and field service staff regarding design insight and troubleshooting

EDUCATION

B.S. Electrical Engineering, University of Idaho 2006

Various seminars and classes for software such as LT Spice, Altium, LabView, and hardware such as Altera and Lattice

Arcflash, LLC

Nov 2012 – Present

ELECTRICAL ENGINEER AND PARTNER

Electronics & consulting company founded in Bend, OR 2013

- Ω Conceptualization, design, and qualification of the company's flagship product: a custom dashboard solution that supports telemetrics and data logging for track racing cars
- Ω Electronics design and PCB layout of RGB LED array
- Ω Design and implementation of intelligent differential locker for a Subaru STI
- Ω HydroFlask bottle test fixture design, implementation, and process design for the rapid testing of 140,000 units that had suspect quality issues

University of Idaho

May 2004 – May 2006

RESEARCH ASSISTANT

Department of Electrical and Computer Science

- Ω Part of a team that created a SCADA test bed with Schweitzer Engineering (SEL) equipment to study vulnerabilities of emerging SCADA architectures.
- Ω Part of a team that performed a traffic infrastructure vulnerability study of Moscow, ID and Boise, ID.

EXTRACURRICULAR

- Ω Pioneered the role of Commute Options Liaison for Advanced Energy Bend to recruit users for an online commute-tracking service and to host various events promoting alternatives to driving alone
- Ω Volunteer trail work and bicycle repair

QUALIFICATIONS

- Altium Designer, MS Office including Visio, LT Spice
- Analog and digital design, power electronics, power management, PCB layout, simulations
- Compose design requirements documents, design specification, and qualification documents
- EMI-compliant designs, EMI troubleshooting
- Design and fabrication of prototypes and test fixtures
- Familiarity with select regulatory standards, such as UL1741 and IEC 62109
- Familiarity with industry equipment, such as mixed signal oscilloscopes, data loggers, multimeters, power quality analyzers, thermal imaging cameras, curve tracers, function generators, and power supplies, including all respective software
- Extensive troubleshooting experience at all system levels

ABOUT JASON OMAN

Since starting my career in 2006, I have enjoyed and suffered the unique turmoil of the solar industry from within a small LLC, PV Powered, and then from the global company Advanced Energy. The years have taught me to continuously adapt my role and always seek ways to bring value. I have an innate need for creation. To be happy, I must be learning and creating. I laugh at long hours and aggressive schedules.

I wish to further my engineering career, with a focus on circuit design, controls, and power electronics.