## Mesa Scharf

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Technical systems oriented leader with nearly 20 years experience in software and controls. My experience includes product ownership of monitoring and control solutions for solar inverters as well as providing directional guidance to forward looking R&D programs. Before joining Product Management, I led a team of engineers focused on development of a cross-inverter communications and control platform which provides a common web-based user interface, role-based access control, utility interactive controls, a Modbus interface, and a service oriented cloud-based solar inverter monitoring and management platform. Other significant accomplishments include managing all aspects of the \$6M DOE funded SEGIS program and later, directional oversight of the \$5.2M DOE SEGIS-AC program. Before working in solar, I developed controls for fuel cell systems that utilized various feedstock ranging from methanol to natural gas.

## Education

BSEE, Electrical Engineering (cum laude), Oregon State University, 1998

## **Professional Experience**

Product Manager, Advanced Energy Industries, Fort Collins, CO

2014- Nov 2015

- Product ownership of monitoring, communications, controls solutions for AE inverters
- Principal investigator for DOE AE SEGIS-AC program and ARPA-E programs

Sr. Engineering Manager, Advanced Energy Industries, Fort Collins, CO

2011-Sept 2014

- Led development of a new embedded Linux based inverter platform including:
- o Autonomous smart inverter control functionality and modern web-UI
  - O Common platform architecture for all AE central inverters
  - o Web services interface and Modbus SCADA communications
- Developed cloud-based two way communications platform for remote inverter management

Director of Development, PV Powered, Bend, OR

2010-2011

- Guidance and oversight of DOE SEGIS-AC program which included:
  - o Storage inverter, communications based island detection, and smart inverter functionality
- Led software engineering development for inverter controls and cloud based monitoring platform

Strategic Program Manager, PV Powered, Bend, OR

2009-2010

• Led 3 year \$6M SEGIS program through all three phases and 2 down-selects

Software Engineering Manager, PV Powered, Bend, OR

2006-2009

- Responsible for single phase inverter product line
- Led development and refactoring of cloud based inverter monitoring platform

Sr. Systems Engineer, IdaTech, Bend, OR

1999-2006

- Responsible for controls ideation, architecture and development for fuel cell systems
- Thorough understanding of electrical, chemical, thermal system integration

Intern, Electrical Engineer. Product Engineering Manager, Micromonitors, Inc., Bend, OR 1996-1999

• Systems engineering role for utility scale power transformer dissolved gas monitoring

I am an active member of the IEEE, and am involved in grid interconnect and communications standards development for smart inverters including IEEE1547, CPUC and Sunspec. I also have five granted patents.