



# Jeff Bassett

Lead Software Engineer

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## L A N G U A G E S

/\* Embedded \*/

C - 9 / 10

C++ - 7 / 10

#!/scripting

Python - 8 / 10

Bash- 7 / 10

<Application="And Web">

C# - 5 / 10

AngularJS - 5 / 10

### Additional Languages

JSON, YAML, React.js, HTML, CSS, Java, Javascript, Typescript, VBA, Powershell

## S O F T W A R E

### Tools

Atlassian Toolset (JIRA, Bitbucket, Bamboo, Confluence, Fisheye), Wireshark, Eclipse IDE, Visual Studio, Jenkins, Cmake, Code Collaborator,

### Version Control Systems

Git, Mercurial, ClearCase, CVS

### General

Windows, Linux, Cygwin, MS Office Suite, MS Visio, MS Project, MS Outlook, MS Teams, Lotus Notes, Sketchup, Mentor Graphics PADS

## A B O U T M E

*Experienced lead software engineer with diverse development background specializing in embedded software designs, real-time programming, wireless device drivers, scripted test environments and build tool development.*

## P R O F E S S I O N A L O V E R V I E W

- Designed and developed multiple board bring-up code, bootloaders, BSP development, complex communication IC device drivers, and distributed processor based real-time software applications.
- Over 4 years of team leadership and supervisory lead experience developing product and software requirements, software architectures, work effort estimation, managerial communication, and providing guidance to peer engineers.
- Full stack development experience in multi-core embedded Linux based operating system.
- Designed multiple product level wireless protocol implementations including downlink and uplink data for communication of device data and file download.
- Multiple full product development experiences from product specifications, hardware/software specifications, designs, implementation and test development.

## E X P E R I E N C E

### Schweitzer Engineering Laboratories Inc.

*Lead Software Engineer (2018 - Present)*

- Presently serving as the sensor technology lead software engineer.
- Scrum master of a location distributed software team consisting of 2 onsite and 4 offsite resources. Responsible for working with the product owner and backlog manager to set sprint team objectives and leading agile sprint procedures and ceremonies.
- Experience conducting effective scrum ceremonies from Sprint kickoff meetings, sprint retrospectives, backlog planning meetings and leading daily standup meetings.
- Implemented multiple full stack product feature improvements in an embedded Linux based product utilizing a Xilinx Zynq SoC.
- Designed and developed a deployable development environment for sustaining developments. The tool set, implemented in python, provides headless installation of the development environment, git source repository retrieval based on product, and initialization of eclipse development workspaces.
- Designed a continuous integration automated test fixture and software package. The python software suite provides deployable firmware interfaces to interact with the DUT, controls input test system stimuli, and provided a feedback loop for full results logging.
- Implemented crash vector parsing toolset in python to support software analysis on TI CC1310 wireless microcontroller.

## HARDWARE

- Oscilloscopes
- DMM
- Logic Analyzers
- Spectrum Analyzers
- Hardware Signal Sources
- In-Circuit Emulators
- Hardware Circuit Diagrams

## PROFESSIONAL DEVELOPMENT

- Crucial Conversations
- Situational Leadership
- Performance Management and Recognition
- Performance Evaluation
- Hiring and Compensation
- Software Inspection Methods

## EDUCATION

2006 - Northern Illinois University, Dekalb, IL  
B.S. Electrical Engineering Technology

## HOBBIESTS

- Game development utilizing Unity engine and C#, C/C++
- Accomplished Oil Painter and illustrator
- Avid woodworker and amateur luthier

## Schweitzer Engineering Laboratories Inc.

### *Software Engineer (2013 - 2017)*

- Lead software developer for new electrical distribution sensor product platform development.
- Responsible for a distributed location 4 developer agile team.
- Produced software architecture proposals, and development estimations for budgetary projections. provided guidance and leadership to team members.
- Created protocol design to support wireless sensor data delivery and worked with third party developer to integrate to user interface.
- Designed and implemented a custom runtime device logging algorithm to record device status and critical runtime data to nonvolatile memory. Designed the logging format, and data retrieval tools for product support and technical troubleshooting.
- Implemented group process improvement for technical documents by releasing full set of document templates and process flow for system specifications, hardware/software specifications, and test specifications.
- Supported product ordering process by training customer service representatives and configuration tool development to aid in product configuration using a GUI front end interface.

## Schweitzer Engineering Laboratories Inc.

### *Associate Software Engineer (2011 - 2012)*

- Produced product, software and hardware requirement specifications for a wireless electrical distribution sensor based utilizing a TI MSP430 microcontroller series.
- Designed and implemented an automated test bed for for a 12 phase underground electrical distribution sensor using python.

## Schweitzer Engineering Laboratories Inc.

### *Circuit Design Engineer (2007 - 2010)*

- Implemented the hardware and software design for an electrical distribution sensor based upon TI MSP430 microcontroller series.
- Created a graphical prototyping software used in developing customized power line sensor LED sequenced displays and calculated the battery impact based upon user usage inputs and targeted weather models.
- Implemented bare metal firmware for an overhead distribution faulted circuit indicator with high visibility LED display.
- Implemented a battery calculation spreadsheet template for verification of lithium battery life with selectable cases and environmental profiles.
- Created hardware design for three phase voltage sensors with LCD user output for wind farm applications.