Sam Bruno

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# EDUCATION

## Continuing Education | May 2013 - Present | edX, Udemy, Coursera

* Python, Algorithms, Data Science, Ruby on Rails, JavaScript, Databases, HTML, CSS, React

## B.S. in Electrical & Computer Engineering | May 2013 | University of Massachusetts-Lowell

* C, Python, Logic Design, Microprocessors, Signals & Systems, Linear Feedback

## B.S. in Geology | May 2008 | William & Mary

* Matlab, GIS, Statistics, Hydrology, Surface Processes, Mineralogy

# WORK EXPERIENCE

## Test Engineer | Osram Sylvania | September 2013 to Present

* Conduct environmental validation testing on complex automotive lighting products. Develop Labview software sub VIs to control test voltage switching and functional cycling.
* Developed software to automate analysis of lighting test data. Software can analyze distribution of currents in different light mode/temperature/voltage conditions, highlight out of spec data, build various plots, and create summary tables among other tools. Developed with Python (pandas, matplotlib, numpy, lxml), Javascript, and CSS.
* Developed software to automate analysis of chamber and product temperature profile data. Software compares measured ramp rates and soak times to automotive industry test specifications.
* Thermal imaging and analysis of control module and LED boards for product development
* Collaboration with design engineers in conducting failure analysis
* Technical test reports

## Engineering Intern | Exelis Harris | January 2012 to October 2012

* Tested and analyzed radar systems using test software, oscilloscopes, and spectrum analyzers
* Contributed to prototype builds

## Hydrologic Technician | US Forest Service | May 2009 to September 2010

* Maintained and monitored soil content sensing devices throughout multiple watersheds in Southern California as part of a decades-long study on forest burning and thinning methods
* Conducted data analysis using Matlab

# SKILLS & ABILITIES

**Data Science / Scripting**: Python, Ruby, Matlab, ExcelVBA, Minitab

**Web Development**: Rails, Javascript, CSS, Sass, HTML, Git, Webpack, React

# PORTFOLIO

[sambruno.me/#portfolio](http://www.sambruno.me/#portfolio)