

# David Redington

## Electrical Engineer

Philadelphia, PA - Email me on Indeed: [indeed.com/r/David-Redington/8c1364a90185bde5](https://www.indeed.com/r/David-Redington/8c1364a90185bde5)

### WORK EXPERIENCE

#### Electrical Engineer

Penn State Applied Research Lab, NRDC - Warminster, PA - March 2014 to September 2014

March 2014 to September 2014

- Modeled circuits using Altium
- Designed switching voltage regulator and EMI filtering circuits
- Designed printed circuit boards using Altium
- Performed conducted emissions and efficiency testing on power supply circuits

#### Test Engineer

Ametek Power and Data Systems - Harleysville, PA - September 2012 to May 2013

September 2012 to May 2013

- Performed pre-qualification testing of electrical aircraft equipment adhering to Airbus's electrical testing standards
- Generated pre-qualification test reports for analysis by senior electrical engineers
- Performed engineering modifications to circuit boards

#### Electronics Technician

Gemalto Inc - Montgomeryville, PA - October 2008 to January 2012

Calibrated and repaired industrial Nd Yag-lasers (factory trained by Rofin)

- Developed and conducted training programs on laser-system preventative- maintenance
- Managed repairs of electronics used in various types of manufacturing equipment
- Supported engineering projects implementing new hardware systems in existing equipment, including running hour meters, vision systems, ESD protection, and retro-fitting contact and contactless smart-card programming hardware

#### Lead Electronic Technician

Bioclimatic Air Systems - Delran, NJ - October 2007 to October 2008

Tested and calibrated high voltage bipolar ionization equipment

- Troubleshoot (at component level) and repaired field service returns
- Verified performance of equipment during start-ups and general field service

#### Lead Electronic Technician

IMET Corporation - Bristol, PA - May 2005 to July 2008

- Assembled prototype circuits for engineering tests (BGA to Through Hole)
- Tested assembled circuit boards for operation and tolerance compliance
- Troubleshoot defective circuit boards on a component level
- Managed and procured inventory for PCB assembly production
- Supported electrical engineers during design process including circuit assembly, and performance verification

## EDUCATION

### **Bachelor of Science in Electrical Engineering**

Drexel University - Philadelphia, PA

June 2015

## SKILLS

Laboratory- Oscilloscope, Spectrum Analyzer, Signal Analyzer, Function Generator, Multi-Meter, and Power Supply Computer- Altium, MatLab, Simulink, LTSpice, PSpice, C (Microchip's CX8), C++, Word, Excel, Visio, PowerPoint, AutoCAD, and SketchUp

## ADDITIONAL INFORMATION

### Project Experience

#### Drexel Senior Design Project

- Team Composition: 3 ECE majors, 2 MEM majors
- Managers: ECE and MEM advising professors
- Funded by NAVAIR
- Project Description: Transport skid automation (personnel following capabilities)
- Technology Used: Raspberry Pi, Arduino, Simulink, Video-Processing

#### Circuit Design (Penn State Applied Research Lab)

- Team Composition: 3 ECE students
- Managers: Physicist/ Electrical Engineer
- Project Description: Switching voltage regulator circuit with EMI filters design and testing
- Technology Used (for design): Altium used for circuit modeling and PCB design, Matlab used for frequency and time domain analysis.
- Technology Used (for testing): Spectrum Analyzer, Oscilloscope, and MultiMeters

#### Vision System for Manufacturing Equipment (Gemalto)

- Team Composition: Process, Industry, and Mechanical Engineers
- Managers: Administrators
- Project Description: Integrated vision inspection equipment in smart card manufacturing equipment
- Technology Used: Cognex In-Sight series cameras and PLCs