



## JEREMY ROBBINS

### PROFESSIONAL BIOGRAPHICAL OUTLINE

#### BACKGROUND

Mr. Robbins is a Test Engineer specializing in data acquisition and mechanical design. He has training and experience in the design and fabrication of experimental setups, reliability engineering, and the repair of complex optical systems. In addition, he is experienced in the configuration and use of instrumented Anthropomorphic Test Devices (ATDs), and the design and instrumentation of thermodynamic, fluid, and combustion systems.

Mr. Robbins earned a Bachelor of Science in Mechanical Engineering at Drexel University.

#### EDUCATION

- Bachelor of Science, Mechanical Engineering, Drexel University, June 2014

#### PROFESSIONAL EXPERIENCE

##### November 2017 – Present | ARCCA, LLC | Test Engineer

- Assist experts with test design and fabrication
- Acquire, process, and display data to appropriate standards
- Design, fabricate, and integrate test fixtures and instrumentation

##### December 2015 – November 2017 | Sightpath Medical | Laser Engineer

- Operated, calibrated, and serviced femtosecond lasers utilized in eye surgery
- Worked with surgeons to optimize patient treatment plans
- Maintained and grew relationships with hospital staff nationwide

##### September 2014 – July 2015 | Drexel University – Combustion & Fuels | Research Assistant

- Operated and maintained Class IV seeded Q-switched Nd:YAG laser
- Constructed resonance control system for use with CRDS spectroscopy
- Designed, modeled, programmed, and fabricated mechanical fixtures and instrumentation

##### June 2012 – June 2014 | Drexel University – Combustion & Fuels | Hess Honors Scholar

- Restored CFR single cylinder variable engine DAQ and fuel injection systems to working order
- Configured and explored use of Fast Flame Ionization Detector for in-cylinder reciprocating engine use
- Designed and fabricated magnet positioner for CEMOR spectroscopy setup

##### September 2012 – March 2013 | Exelon – Nuclear Generation | Balance of Plant Engineering Co-op

- Completed unaccompanied walkdowns and data collection on multiple plant systems in protected area
- Created relational database dashboards using Oracle Hyperion to prioritize and classify components and work
- Improved methods of analyzing system data by integrating automated plant data collection with VBA and Excel

**September 2011 – March 2012 | Exelon – PECO Energy | Reliability Engineering Co-op**

- Analyzed and redesigned distribution circuits in Philadelphia to improve availability and maintainability
- Assisted in development of multiple Access databases to improve historical reliability analysis capability
- Created automated method to geographically plot work via Yahoo Maps API to increase crew throughput

**September 2010 – March 2011 | Micro-Coax | Product Realization Engineering Co-op**

- Coordinated with manufacturing engineering and sales to facilitate production on time and budget
- Troubleshoot defective product to improve manufacture via modifying processes per ISO 9001:2008 standards
- Determined if components and assemblies met mil-specs and/or customer specifications

**COMPUTER SKILLS**

- **CAD/Simulation:** Fusion 360, Creo 2.0, FEMM
- **Computational:** imc FAMOS, MATLAB, Octave
- **Miscellaneous:** LabView, Oracle Hyperion, Access, Visio
- **Hobby:** Arduino IDE, Raspian, Lua, Python