

ZACHARY J. SILVA

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OBJECTIVE

To utilize my broad inventory of electrical engineering educational and work experiences for an entry-level engineering position

EDUCATION

Bachelor of Science Electrical Engineering, May 2017

Rose-Hulman Institute of Technology, Terre Haute, IN

Status: **Senior**

Related Courses: Microwave/Millimeter-wave Engineering, Digital Systems, Wireless Systems, Electromagnetic Metamaterials, EM Fields and Waves, Communication Systems

GPA: 3.50/4.00

SKILLS

- Digital system design – Verilog, VHDL
- RF/Microwave Simulations – CST
- High Frequency Test & Calibration – VNA
- Digital Signal Processing – Matlab, Labview
- Soldering – printed circuit boards
- Cyber security – FPGA, ASIC
- Embedded systems – C, Assembly
- Lab Testing- Oscilloscope, DMM
- Programming – Linux, Python
- Debugging and troubleshooting

EXPERIENCE

Sandia National Laboratories, Albuquerque, NM

Summer 2016

Center for Cyber Defenders R&D Intern

- Supported projects involving authenticating and trusting FPGAs using formal verification methods and simulation test benches
- Provided assistance on cutting edge research and development for the purpose of protecting our nation's security in a national laboratory
- Obtained a DOE security clearance

GE Aviation – Unison Industries, Jacksonville, FL

Summer 2015

Digital Engineering/Technology Intern – Ignition Exciters Team

- Assisted in developing FPGA logic in support of exciter circuitry using Verilog; created PWM, spark rate control, timing, and memory modules
- Supported in generation of engineering documents such as test procedures and engineering change documents
- Performed component and circuit assemblies as well as high voltage lab tests for LM2500 Exciter

Bridgers and Paxton Consulting Engineers, Inc., Albuquerque, NM

Summer 2014

Electrical Engineering Intern – Los Alamos National Labs (LANL) Group

- Supported design projects directly for LANL related to lighting and power by utilizing AutoCAD and Revit software tools
- Conducted power and lighting calculations for many larger scale projects using Visual and SKM Powertools
- Extended knowledge of arc flash testing and PPE requirements
- Created and revised electrical one-line diagrams

HONORS & ACTIVITIES

- Rose-BUD (Building Undergraduate Diversity) Scholar
- Dean's List Honoree – 2013-2016
- Member of Institute of Electrical and Electronics Engineers (IEEE)
- Rose-Hulman Football

