ZACHARY J. SILVA

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OBJECTIVE

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

EDUCATION

Bachelor of Science Electrical Engineering, May 2017
Rose-Hulman Institute of Technology – Terre Haute, IN
Status: **Senior** – 145/194 credits
Related Courses: Microwave/Millimeter-wave Engineering, Digital Systems, Wireless Systems, Electromagnetic Metamaterials, EM Fields and Waves, Communication Systems
GPA: 3.5/4.0

SKILLS

- Digital system design – Verilog, VHDL, SV
- 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 – 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 by developing coverage and functional testbenches
- Performed research on FPGA equivalency checking which verifies VHDL/Verilog code and the corresponding netlist are mathematically equivalent
- 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