

Noah W. Johnson

REFERENCES AVAILABLE UPON REQUEST

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Technical Skills

Data Science	Python, Deep Learning using Tensorflow, Event driven simulation using C/C++/VHDL, MATLAB
Embedded Systems	2 years of FPGA logic design using VHDL, Programming of said architectures using C
DSP/Control Systems	Design/analysis of digital control systems and filters using MATLAB, Delta analysis of control systems
Other	Robust knowledge of most operating systems, Effective communicator, public speaker, project coordinator

Education

University of Rhode Island

BACHELORS OF SCIENCE, COMPUTER ENGINEERING (GPA : 3.05)

South Kingston, RI

Aug. 2014 - May 2018

Professional Experience

Handheld Arbitrary Waveform Generator - AstroNova Inc.

EMBEDDED SYSTEMS ENGINEER

Kingston, RI

Aug. 2017 - Present

- Designed and implemented FPGA-based architecture using VHDL and Xilinx Vivado Tools.
- Wrote firmware to support control of waveform parameters using C and Vivado SDK.
- Assisted in writing PC based application for fine control of waveforms using C#.

University of Rhode Island IT Services

IT HARDWARE SPECIALIST

Kingston, RI

Oct. 2016 - Present

- Serviced/optimized hardware and software daily for students/faculty. Honed communication and teamwork skills.

VoltServer Inc.

PRODUCTION ENGINEERING INTERN

East Greenwich, RI

Mar. 2017 - Aug. 2017

- Designed and constructed production testing / validation equipment and software.
- Performed RMA work on high voltage power transmission boards. Honed soldering ability.

Zepf Mental Health Center

DATABASE ENGINEER

Toledo, Ohio

May 2016 - Aug. 2016

- Developed HIPAA-compliant health care credential database using MS Access and MySQL.
- Worked with fellow team members to roll out large scale changes to system architecture.

Honors & Awards

2016 - 17 **Dean's List**, University of Rhode Island

South Kingston, RI

2014 **Eagle Scout**, Boy Scouts of America, Troop 27

Toledo, OH

Project Experience

Neural Network Driven Computer Vision

ELE 408 - Embedded System Design

FOCUS: MACHINE LEARNING, EDGE COMPUTING, EMBEDDED SYSTEMS

Spring 2018

- Developing Neural Network to quickly identify movement within live IP Camera footage using Tensorflow and Google SSD MobileNet.

Various Models of Digital Control

ELE 458 - Digital Control Systems

FOCUS: DESIGN OF SISO/MIMO CONTROL SYSTEMS, OBSERVER-BASED SYSTEMS, DIGITAL TRACKING SYSTEMS

Spring 2018

- Extensively used Matlab, Simulink and lab hardware to derive and implement linear hardware control systems.

Fractal Algorithm Optimization

ELE 405 - Digital Computer Design

FOCUS: INSTRUCTION SET DESIGN, PIPELINE OPTIMIZATION

Fall 2018

- Optimized 7 Stage Pipeline CPU written in VHDL for graphics processing. **Earned 3rd best optimization metric in class of 30.**