

Timothy W. Kilmer Jr.

3935 Colechester Mtn Rd. Walton, NY 13856 • kilmertw@clarkson.edu • (607) 643-6631

EDUCATION

Clarkson University, Potsdam, NY

Bachelor of Science in Electrical Engineering, Minor in Mathematics ; Dean's list, GPA 3.534 Fall 2016-2018

State University of New York (SUNY) at Oneonta, Oneonta, NY

Bachelor of Science in Physics, 3+2 Engineering program; GPA 3.75 Fall 2013-2018

TECHNICAL SKILLS

Hardware Skills: Oscilloscope, Function Generators, Power Analyzer, Digital circuit design, Controls Design, Soldering.

Programming Languages: Python, C++, VHDL, Verilog, L^AT_EX.

Software Tools: MATLAB, Simulink, Altera Quartus II, Xilinx Vivado and PlanAhead, Diptrace, Git, OPC-UA, Windows, Linux.

ENGINEERING EXPERIENCE

Electrical/Controls Engineer Intern, LC Drives, Potsdam NY May 2017-present

- Designed controls for automation using DipTrace schematic tool.
- Integrated git and python for development of automation software.
- Designed instrumentation controls to meet the national electric code by NFPA and project requirements.

Hack Potsdam Hack-a-thon, Clarkson University, Potsdam NY March 2017

- Implemented CPU in VHDL hardware description language to design the ALU and VHDL code debugging.
- Worked with Git and Git-hub for version control of group code.

Graphene Structure Simulation, National Science Foundation, Troy, NY June - August 2016

- Prepared scripts for handling input and to run files used in Density Functional Theory (DFT) calculations.
- Rapid 3D prototyping of molecular structures for kinetic learning.
- Basic introduction to Linux terminal and ssh file transfer from server and home computer.

Energy Harvesting/MEMS, SUNY Research Foundation, Vestal, NY May - July 2015

- Interned as a Lab Assistant in the research and fabrication of MEMS and energy harvesting devices.
- Oversaw design of photomasks, photolithography printing and development, and Reactive Ion etching.
- Worked on restoration of MEMS devices and proper clean room procedures using manual wire-binding machine.

LEADERSHIP EXPERIENCE

Peer and Group Tutor, SUNY Oneonta, Oneonta, NY February 2015 - May 2016

- Guided students in vector calculus in a one-on-one environment.
- Led student peers in general college physics for walk-in tutoring.

Manager, Oneonta Tech. and Engn. Club, SUNY Oneonta, Oneonta, NY October 2015 - May 2016

- Supervised club and shop activities relating to electronics, wood working, and project design.
- Kept innovatory of tools, equipment, and supplies.

Physics and Astronomy Club, SUNY Oneonta, Oneonta, NY September 2014 - May 2016

- Public Relations- Held communication between public and club advertising events and activities.
- Treasurer- Responsible for the management of club expenses and budget of \$500 for events and activities.
- Coordinated club events and activities with President and Student Union.

Eagle Scout Award, Walton, NY April 2012

- Led and planned project that entailed the construction of record boards for local high school track teams.
- Organized volunteers in community in the fund raising, construction, and instillation of the record boards.
- Complied with constraints set by the high school, Boy Scouts of America, and State Code.

RELEVANT AFFILIATIONS

Clarkson Open Source Institute (COSI), Clarkson University, Potsdam, NY 2016 -present

- Robotics using Robot Operating System (ROS).