

Justin Ross

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EDUCATION

State University of New York (SUNY) College at Oswego 12/2018

Bachelor of Science in Electrical and Computer Engineering

Minor in Computer Science

GPA: 3.63

Dean's List: Fall 2015, Fall 2016, Spring 2017, Fall 2017, Spring 2018

President's List: Spring 2016

John C Birdlebough High School 06/2015

New York State Advanced Regents Diploma with Honors

GPA: 94/100

High Honor Roll: Fall 2011-Spring 2015

Senior Key in Science: Spring 2015

PROJECTS

Hexapod Robot 08/2018-Present

Senior Engineering Capstone

- Collaborate as a member of a design team of two other Electrical and Computer Engineering majors
- Programs and builds a controlled walking robot using 12 servos

Brute Force Password Cracker for Web of Trust 07/2018

Privacy/Security/Cryptography Final Project

- Wrote a brute force password cracker python script and deployed that on a Django server
- Edited Web of Trust Interface to receive a user input, and make a call to the Django server to crack the password

LEG V8 Microprocessor Project 05/2018

Computer Architecture Final Project

- Collaborated as a member of a team of three other Electrical and Computer Engineering majors
- Designed a basic microprocessor in VHDL to run on the Nexsys 4 FPGA board

Shopping Cart Web Service 01/2018 - 05/2018

Web Services Projects

- Implemented a basic shopping cart web service in five different frameworks
- Made external API calls to a nutrition data base and stored a collection of items into a local mySQL database

Multi-Function Clapping Circuit 12/2017

Microelectronics Final Project

- Collaborated on an electronics design project with one other Electrical and Computer Engineering major
- Built a sound sensing circuit that had two different outputs depending on the amplitude of the sound

Autonomous Driving and Parking Rover 05/2017

Microprocessor Applications Final Project

- Collaborated as a member of a software design team of two other Electrical and Computer Engineering majors
- Developed an autonomous rover that could determine which path on a pre-defined track to take and find an available parking space

Random Number Generation Math Game 12/2016

Digital Systems Final Project

- Collaborated as a member of a digital design team of two other Electrical and Computer Engineering majors
- Designed a playable binary math game on the Altera Cyclone II development board using only digital logic

RESEARCH EXPERIENCE

LED Flicker SUNY Oswego 05/2018 - 08/2018

- Designs and constructs the research apparatus
- Programs the software for data collection and processing using MATLAB and LabVIEW
- Studies the causes of LED Flicker and researches possible correlation of driving current to flicker

Electrohydrodynamics SUNY Oswego 03/2017 - 05/2018

- Constructs the research apparatus to determine the hydroelectric forces that occur during ionic winds
- Collects data using slow motion cameras, lasers, and photo-detectors
- Studies the hydro-electric forces acting on a needle to discover ways to harness mechanical energy

WORK EXPERIENCE

Campus Technology Services SUNY Oswego 05/2017 - Present

Network Assistant

- Assemble and maintain the uninterruptable power supplies for the campus network
- Prepare Cisco access points and switches for deployment
- Assist supervisor in connecting with IT support companies to solve technical problems on campus

Office of Learning Services SUNY Oswego 08/2016 - Present

Peer Tutor

- Clarifies misunderstandings students may have to improve the academic standing of students
- Develops testing strategies for student assessment purposes
- Manages student appointments and walk-in on daily basis

Disability Support Services SUNY Oswego 08/2015 - 05/2017

Note Taker

- Compiles material from lectures into a comprehensive notebook to assist students in need
- Submits the prepared notes promptly after class
- Maintains anonymity while writing notes to ensure and maintain security and confidentiality

Sears Roebuck and Co. Clay, NY 05/2016 - 01/2017

Cashier

- Conducted a myriad of monetary transactions to ensure the profitability of the organization and customers
- Worked with consumers in the return of items to maintain positive retention of consumers
- Collaborated with fellow associates in order to locate products for patrons

SKILLS AND COMPETENCIES

Programming Languages: Java, Assembly, C, VHDL, HTML, JavaScript, Python, Common Lisp

Software: MATLAB, LabVIEW, AutoCAD, Multisim, Microsoft Office, LATEX

Laboratory: Oscilloscope, Function Generator, and Multimeter

CLUBS AND ORGANIZATIONS

Math Club 09/2017 - 05/2018

Secretary

Institute of Electrical and Electronics Engineers 08/2016 - Present

Member