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: 3.67
Dean's List: Fall 2015 – Fall 2018

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 - 12/2018
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 through the use of 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 – 12/2018
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 – 12/2018
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, Multsim, 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 – 12/2018
Member