Jackson Speed Kopitz

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EDUCATION

Cornell University, College of Engineering, Ithaca, NY

Expected May 2020

Bachelor of Science in Electrical and Computer Engineering, Minor in Computer Science

Relevant Coursework: Computer Architecture, Embedded Systems, Intelligent Physical Systems, Discrete Structures, Signals and Systems, Digital Logic and Computer Organization, Object-Oriented Programming and Data Structures, Microelectronics, and Introduction to Circuits for Electrical Engineers

RELEVANT EXPERIENCE

Northrop Grumman Corporation, Redondo Beach, CA, College Technical Intern

June - August 2018

- Performed manual and automated calibrations and compared the benefits each for oscilloscopes, power supplies, digital multimeters, gaining hands-on hardware experience
- Calibrated several AC/DC standard references with metrology engineers
- Performed virus scans, sanitization and imaging on DC/LF and Radio Frequency measurement and test equipment
- Led a team of 4 interns and collaborated with engineers and managers to develop a poster and presentation explaining the work flow within the Engineering Asset Management Department at the Northrop Grumman Explore Aerospace Poster Competition

CUSail - Cornell Autonomous Sailboat Team, Ithaca, NY, Business Team Lead

August 2016 – Present

- Develop an inexpensive, mass-producible, and fully autonomous robotic sailboat that can intelligently navigate
- Lead a team of 4 to manage a budget over \$18,000, gain corporate sponsors, and develop a website
- Collaborate with a team of 10 to design and manufacture all mechanical components of the boat

Cornell Computing and Information Science, Cornell University, Ithaca, NY, Consultant August – December 2017

• Held weekly office hours, helped students during recitation sections, and graded assignments and exams

PROJECT HIGHLIGHTS

Autonomous Mapping Robot, Applied Skills: C, Arduino, Analog Circuitry, FPGA, PCB Design

Fall 2018

 Designed and fabricated a robot that could navigate a maze using a DFS and Dijkstra algorithm, send robot and wall location to a GUI, identify shapes and colors, and detect audio and infrared signals

Quadcore Processor System, Applied Skills: Processor, Memory, and Network Design, Verilog

Fall 2018

• Implemented and integrated four processor cores, four instruction caches, a data cache with four banks, and multiple four-port networks to connect the different subsystems of the design

NON-TECHNICAL EXPERIENCE

Engineering Peer Advising, Cornell University, Ithaca, NY, Peer Advisor

August 2018 - Present

• Work with a faculty advisor and co-peer advisor to create a lesson plan for a section of 14 new students on student life, enrollment processes, and finding appropriate university offices for academic and personal needs

The Cornell Store, Cornell University, Ithaca, NY, Student Supervisor

November 2016 – Present

• Oversee student employees, operate a cash register, manage store merchandise, and assist on the store floor

MUSIC INVOLVEMENTS

Big Red Bands, Cornell University, Ithaca, NY, Pep Band Treasurer

August 2016 - Present

• Play trombone in the largest student-run organization in the Ivy League at sporting and non-sporting events

Pacific Crest Drum and Bugle Corps, Diamond Bar, CA, Hornline

January 2016 – August 2017

- Played Euphonium and rehearsed up to 12 hours per day to perfect an 11-minute long show
- Toured the country performing and competing at stadiums such as the Rose Bowl and Lucas Oil Stadium

SKILLS AND INTERESTS

Technical Skills: Python, Java, C, C++, RISC V, ARM, Verilog, Bash, PCB Design, Soldering, Mold-Making, Composite-Making, CAD Solidworks, LaTeX, Microsoft Word, Excel, and PowerPoint **Interests:** Skiing, Water Polo, Swimming, Sailing, Field Crumpets, Dogs