

Jackson Speed Kopitz

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School Address:
305 Oak Avenue
Ithaca, NY 14850

EDUCATION

Cornell University, College of Engineering, Ithaca, NY **Expected May 2020**
Bachelor of Science in Electrical and Computer Engineering, Minor in Computer Science
Dean's List – Fall 2018

Relevant Coursework: Operating Systems, Design with Embedded Operating Systems, Computer Architecture, Embedded Systems, Intelligent Physical Systems, Discrete Math, Signals and Systems, Digital Logic and Computer Organization, Object-Oriented Programming and Data Structures, Microelectronics, and Introduction to Circuits

RELEVANT EXPERIENCE

Northrop Grumman Corporation, Redondo Beach, CA, *College Technical Intern* **June – August 2018**

- Performed manual and automated calibrations and compared the benefits of each for oscilloscopes, power supplies, and 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

Tree Irrigation System, Applied Skills: Python, Real Time Programming, I/O **Spring 2019**

- Designed and built an system using a Raspberry Pi that irrigates trees an amount of water calculated from weather forecast data and tree water pressure in order to maintain ideal water pressure in the tree's transport system

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

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

Engineering Peer Advising, Cornell University, Ithaca, NY, *Peer Advisor* **August 2018 – May 2019**

- Advised a section of 14 new students on student life, enrollment processes, and adjusting to Cornell

MUSIC INVOLVEMENTS

Big Red Bands, Cornell University, Ithaca, NY, *Pep Band Treasurer* **August 2016 – Present**
Blue Stars Drum and Bugle Corps, La Crosse, WI, *Baritone* **Summer 2019**
Pacific Crest Drum and Bugle Corps, Diamond Bar, CA, *Euphonium* **Summer 2016, 2017**

SKILLS AND INTERESTS

Technical Skills: Python, Java, C, C++, RISC V, ARM, Verilog, Bash, PCB Design, Soldering, HTML, CSS, Mold-Making, Composite-Making, CAD Solidworks, LaTeX, Microsoft Word, Excel, and PowerPoint

Interests: Squash, Skiing, Water Polo, Swimming, Sailing, Field Crumpets, Dogs