# **Jackson Speed Kopitz**

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School Address: 305 Oak Avenue Ithaca, NY 14850

#### **EDUCATION**

Home Address:

Cornell University, College of Engineering, Ithaca, NY

**Expected May 2020** 

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

GPA: 3.23

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, Member

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