

# John K. Murphy

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1004 Packard Road, Ann Arbor, MI 48014

## Education:

### University of Michigan – College of Engineering

April 2018

- Bachelor of Science in Computer Science Engineering
- Cumulative GPA: 3.09/4.00
- Relevant Coursework: Web Databases and Information Systems, Data Structures and Algorithms, Program and Introductory Data Structures, Music Signal Processing, Computer Organization, and Electronic Circuits.

### Hong Kong University of Science and Technology

June – Aug. 2016

- Completed a seven-week linear algebra course and explored the sights and culture of Hong Kong and Thailand.

## Experience:

### Intern, CafeMac Sonoma, California

May – Aug. 2015

- Performed Hard Drive removal and replacement, data recovery, phone screen repair, sales of computer products, as well as over-the-phone and in person customer support.
- Aided in the preservation of a small business of four people by being in charge of store maintenance, customer deliveries and the training of future interns, as well as technical support and service.

### Mentor, Michigan Engineering Zone Detroit, Michigan

Nov. 2015 – Present

- Supervised high school students in building a robot to compete in the F.I.R.S.T. Robotics Competition, by helping them develop game strategy, robot design and programming.
- Mentored students by giving advice on developing strong study habits, setting career goals, and pursuing academic interests inside and outside the classroom

### Fundraising Chair, Theta Tau Ann Arbor, Michigan

April 2016 – Present

- Raised money for local philanthropic causes as well as coordinated with Habitat for Humanity to plan a Detroit Pistons game fundraiser.

## Projects:

### Traveling Salesman Problem Solver; EECS 281

May 2016 – June 2016

- Developed a computer program that provides solutions to the Traveling Salesman Problem depending on the mode: Brute Force, Fast Estimation and a combination of the two known as Optimal path.
- Utilized algorithms and heuristics such as the Branch and Bound algorithm and the Nearest Neighbor heuristic.

### Music Synthesizer and Transcriber; Engineering 100

Jan. 2015 – April 2015

- Created a music synthesizer computer program that could play several instruments as well as transcribe music to output the notes according to standard Musical Staff Notation using Fourier Transforms.

## Skills:

- Programming Languages: C++ (fluent), Java (proficient), C, Python, HTML, CSS, SQL (some experience)