Koya Saito

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EDUCATION

Michigan State University **Expected Graduation May 2023**

- Bachelor of Science in Computer Science
- **GPA**: 3.55
- Sophomore Undergraduate

CURRENT POSITIONS

Systems Intern | Fraunhofer USA | East Lansing, MI **January 2020 – Present**

Developing software and maintaining laboratory equipment for coatings and diamond technologies.

- Writing programs for hardware: using twinCAT and LABVIEW
- Designing intuitive user interface for laboratory systems

Project Head | Burgess Institute | East Lansing, MI **January 2020 – Present**

Received funding to gather a team and build a mobile app. Working with Michigan State's burgess institute for professional contacts and regulation of finances.

- **Skills include**: React Native, REST API, UI/UX Design
- Understanding of task delegation, customer discovery, design/iteration process

Head of Events | MSU Entrepreneurship Association | East Lansing, MI **May 2020 – Present**

On the board of directors, responsible for organizing events the organization hosts. With the goal of maintaining a campus presence and connecting students with ideas to professionals with insight.

- Coordination with other executive members
- Club representation during formal outreach
- Weekly updates/progress reporting

EXPERIENCE

Optimization Intern | University of Michigan | Ann Arbor, MI **July 2018 – August 2018**

Worked under principle researcher to increase efficiency of microfluidic flowrate sensor.

- Studied Microfluidics and the micro-fabrication processes
- Ran experiments and collected data using LabVIEW engineering software
- Processed and analyzed data using Microsoft Excel and MATLAB
- Work resulted in %80+ reduction of electricity consumption

Software Developer Intern | Natural Gas Systems | Novi, MI **May 2019 – August 2019**

Developed Arduino-based hydrogen sensor as an alternative to expensive competitors to use in product development.

- Identified and related sensor voltage and hydrogen density curves
- Designing, maintaining and deploying experimental setup and procedure for sensor calibration
- Using Arduino microcontroller to integrate hydrogen sensor into experimental setup using multiple languages

Research Intern | PIDC | Ann Arbor, MI **September 2018 – February 2019**

Pacific Industrial Development Corporation | Researched metal oxide powder to create an abrasive lens polish for name brand retailer. Managed polish abrasion experiments independently in a lab setting.

- Water milling, Particle analysis, Calcining material
- Managed workflow and timely reporting
- Assigned project was sold to name brand retailer

ADDITIONAL EXPIRENCE – For more details/projects visit my GitHub page (**github.com/KoyaS**)

LARK Project: Vibrating Hearing aid

Highschool engineering capstone to create a hearing aid for the deaf, led by myself and a partner. By translating sound to vibration, the aim of this project was to provide spatial awareness and audio comprehension to the disabled. Resulted in functional prototype and first in category prize.

Interlacing Image Compression

Challenged myself to, in one day, write an image compression algorithm. Used python pillow library to build a lossy compression system, which reduces image size by up to %50 per cycle.

Snake AI

Having previously written a neural network library, started this project as an application of it. Using the library, taught a computer how to play the classic game of snake. Utilized a genetic learning algorithm and self-written cost function.

ADDITIONAL SKILLS

- Object oriented programming
- Captain of MPSA crush soccer team
- 45+ Volunteer hours at Food Gatherers