Koya Saito Fourth-Year Undergraduate Bachelor of Science – Computational Data Science Michigan state University

### **EDUCATION**

#### Michigan State University | Lansing, MI

Bachelor of Science - Computational Data Science

- Coursework: Machine Learning Optimization, Calculus III, Matrix Algebra, Probability and Statistics, Database Systems, Israel Nation Study Abroad, Human Values & Ethics

### **PROFESSIONAL EXPERIENCE**

#### Junior Data Analytics Coordinator | IZEA

- Joined analytics team at 1 member and through presentations and work grew team to 16
  Facilitated production of models to compute anticipated campaign costs using various unsupervised
- Facilitated production of models to compute anticipated campaign costs using various unsuper learning approaches and statistical modeling
- Use of R and React to create dashboard automating weekly reporting calculations
- Automation of NLP sentiment model to infer campaign market response in a dashboard
- Standardized curation of team datasets using SQL / REST API queries

### Lab Assistant | Fraunhofer USA

- Designed and implemented circuit which performs electro-impedance spectroscopy through cyclic voltammetry
- Implemented noise reduction algorithms and designed circuits which increased performance

### Intern | University of Michigan, Burns Lab

- Analyzed electrical consumption of microfluidic flowrate sensor using Excel, MATLAB
- Developed algorithm which resulted in an %80 reduction in electrical consumption

# EXTRACURRICULAR ACTIVITIES

### Co-President | Michigan State Entrepreneurship Association

- Headed executive board in planning for weekly meetings and events throughout school year
- Hosted events at scale eg. a trip to San Diego/Las Angeles to visit accelerators, 3-day 15 speaker series, a career fare with 20 companies and >100 attendees, a pitch competition
- Raised and disbursed funds to student-led startups and events

### Member | AI Club

- Casual exploration of machine learning models: decision tree, MLP, MediaPipe image processing, adversarial attacks, SVM
- Fetal state predictor project member: Used Keras/Tensorflow to predict the condition of a child before birth working in a close group. Achieved 3<sup>rd</sup> place in CodeGreen competition

# ACADEMIC PROJECTS

- Long to short form content conversion: Using NLP embedding model and YouTube transcript API to capture and classify (Kmeans, RandomForest, SVM) areas of high interest dialogue.
- Simulated epidemic with tuning parameters (HTML, CSS, JavaScript)
- Neural network which plays snake trained using genetic selection (Python)
- Spartan Tutors: Mobile app for scheduling tutoring sessions with a growing user base, currently at >100 enrolled students, >20 enrolled tutors (Expo, React Native, Firebase)
- Clash Royale card selection frequency network visualization

## SKILLS

Advanced Python: Pandas, Numpy, Tensorflow, Matplotlib, Seaborn, Scikit-learn, Requests Understanding of: SQL, R, HTML, CSS, JavaScript, React Native, Firebase, AWS, API Requests

June 2022 - Present

December 2023

July 2018 - Aug 2018

January 2020 – May 2022

May 2020 - July 2023