EDWARD SUN

edwsun@umich.edu es2k.github.io

EDUCATION

University of Michigan, Ann Arbor

September 2018 - May 2021

Computer Science and Math; **EECS 442:** Computer Vision, **445:** Machine Learning GPA: 4.0/4

Thomas Jefferson High School for Science and Technology

September 2014 - June 2018

Computational Physics Research

GPA: 4.4/4

RESEARCH

Towards Universal Evaluation of Image Annotation Interfaces

A.M. Vernier, J.Y. Song, E. Sun, A. Kench, W.S. Lasecki.

In Proceedings of the ACM Symposium on User Interface Software and Technology (UIST 2019).

PECAM

Cycle-consitent GAN for steganography in security (Under review ACM MobiCom 2020).

EMO

Fast and accurate emotion recognition on eyewear devices (Under review ACM MobiCom 2020).

User Anomaly Detection

Deep learning model for Android permissions control (Under review IEEE DSC 2019).

WORK EXPERIENCE

Amazon Web Services

May 2019 - August 2019

Herndon, VA

Software Development Engineer Intern

Dec 2018 - Present

Artificial Intelligence Lab, University of Michigan

State Key Laboratory of Novel Software Technology, NJU

Ann Arbor, MI

 $Research\ Assistant$

June 2017 - Present

Research Intern

Nanjing, China

ACTIVITIES AND PROJECTS

- · University of Michigan Programming Team: Competing in the International Collegiate Programming Contest (ICPC 2019).
- · Michigan Hackers: Launched the React Native team to teach programmers mobile app development.
- \cdot Real-Time Crowd Analytics with Group Emotion Recognition: Achieved accuracies 21.17% higher than baseline and speeds $30 \times$ faster than VGG-Face LSTM models.
- · StockWise, MHacks 11: Applied ML and sentiment analysis to create a stock market assistant that predicted price movement through TensorFlow and GCP. 1st place Goldman Sachs competition.
- · MIT Battlecode 2018: Competed in a strategy contest where teams wrote AI combat, pathfinding, and communication algorithms. Quarterfinalist.
- · Large Band Gap Topological Insulators of Bi: Modeled spin-orbit coupling in quantum spin hall effect of 2D bismuth TIs. Presented to visitors from international research institutions.

AWARDS

Siemens Competition Semifinalist
USA Computer Olympiad Gold Division
American Invitational Math Examination Qualifier

2016, 2017

2017

2015 - 2017