

EDUCATION

- **University of Michigan** Ann Arbor, MI
Computer Science; Class of 2021; GPA: 4.0 Sept 2018 – Present
- **Thomas Jefferson High School for Science and Technology** Alexandria, VA
Computational Physics Research; ACT: 35; GPA: 4.4 Sept 2014 – June. 2018

EXPERIENCE

- **CROMA Lab, University of Michigan** Ann Arbor, MI
Research Assistant Dec 2018 - Present
 - **TalkToMe:** Created a new way of implementing system testing by using non-expert crowdsourced workers to write diverse dialog through word clustering to build more comprehensive task-oriented dialog systems.
- **State Key Laboratory of Novel Software Technology, Nanjing University** Nanjing, China
Research Intern June 2017 - Aug 2017
 - **Gemo: Real-Time Crowd Analytics with Emotion Recognition on Mobile Platforms:**
Built a mobile platform that performs real-time group emotion recognition and facial detection for crowd analytics. Achieved an accuracy 21.17% higher than baseline on test datasets and speeds 30 times faster than VGG-Face LSTM models.
 - **Awards:** Siemens Competition Semifinalist
6th Place ACM International Conference on Multimodal Interaction Grand Challenge

LEADERSHIP

- **Michigan Hackers** Ann Arbor, MI
React Native Team Leader Nov 2018 - Present
 - **React Native:** Launched the React Native team to teach programmers how to build cross-platform mobile apps for iOS and Android with JavaScript and Expo.
- **TJHSST Frontiers in Science Club** Alexandria, VA
Founder and President Jan 2018 - June 2018
 - **Teaching:** Discussed new scientific topics and discoveries. Invited guest speakers to visit and give seminars on cutting-edge research and aspiring scientists to present student research projects done over senior year or over the summer at internships.

PROJECTS

- **StockWise, MHacks 11:** Applied ML, sentiment analysis, web scraping, and web design to create a stock market assistant that predicted price movement through TensorFlow and GCP. 1st place in Goldman Sachs competition.
- **Team [], MIT Battlecode:** Wrote resource management, pathfinding, and network communication algorithms in Python to compete in a challenge that combines battle strategy, software engineering, and AI. Quarterfinalist and invited to attend Finalists' Celebration at MIT.
- **Large Band Gap Topological Insulators of Bi:** Designed heterostructures of monolayer bismuth layers to create more efficient topological insulators. Conducted ab-initio computations to model spin-orbit coupling in quantum spin hall effect. Presented research to visitors from international research institutions.
- **Spintronics Research:** Discovered new spintronics materials by hydrogenation of transition metal (V, Cr, Mn)-doped phosphorene through computer modelling with the density functional theory.

AWARDS

- **Siemens Competition Semifinalist:** 2016, 2017
- **National AP Scholar:** 2018
- **USA Computer Olympiad Gold Division:** 2017
- **AIME Qualifier:** 2015 - 2017
- **1st Place Fairfax County Regional Science Fair:** 2017