# Justin Yu

## 617-957-0655 | www.jsyu.me | justinyu@mit.edu

## **EDUCATION**

# **Massachusetts Institute of Technology**

Sept 2018 - June 2022

- Intended Major/Minor: Electrical Engineering and Computer Science/Linguistics
- Relevant Courses: Machine Learning, Multivariable Calculus, Introduction to Linguistics

# **Winchester High School**

Sept 2014 - June 2018

- GPA: 4.21 out of 4.00 (weighted) | SAT: 1580
- Clubs and Organizations:
  - Captain of Robotics Team

**July 2016 - June 2018** 

- Built and programmed fully autonomous robots in C to perform various tasks (i.e. object detection, color sorting, terrain navigation, line and wall following)
- Utilized sensor data from stereo cameras, gyroscopes, reflectance sensors
- Founder and President of Science Olympiad Team

Sept 2015 - June 2018

• Coursework: Independent CS Research Project (Abstractive Summarization: Current Methods and Drawbacks)

#### **EXPERIENCE**

# **UROP Researcher at MIT CSAIL (InfoLab)**

Sept 2018 - Present

- Implementing sequence models and other ML techniques to generate linguistic annotations in order to inform and improve the output of question-answering systems; used Amazon Turk to collect custom training dataset.
- Applying question-answering technology to MOOC content by building a web-based tool for annotating videos

# **Summer Software Engineering Intern at Accion Systems**

**July 2017 - Aug 2017** 

- Interned for Accion Systems, a micro-satellite propulsion technology startup; created an interface for reprogramming satellite thruster chips live in space by sending commands to bootloader over UART protocol
- Improved data processing GUI for analyzing thruster test data using tkinter and Python scientific libraries

# **Researcher at MIT PRIMES**

Feb 2017 - June 2017

- Researched software control systems in collaboration with Head of Software at IPG Photonics
- Research title: Automated calibration and a real-time web-based control interface for fiber lasers.

## **Student at MIT Beaver Works Summer Institute**

July 2016 - August 2016

- Utilized LIDAR and stereo camera data to implement autonomous navigation, planning, and mapping algorithms for the RACECAR platform, curriculum equivalent of MIT undergraduate class "Robotics: Science and Systems"
- Took rigorous daily lectures on topics such as: autonomous robotics, kinematics, planning and localization etc.

## **Co-founder and Director of MAHacks**

**Aug 2016 - July 2018** 

- Founded MAHacks, a high school hackathon with a focus on project sustainability and entrepreneurship
- Managed corporate relations and outreach with 20+ sponsor companies, negotiated \$5000+ of sponsorship value

## **Board Member and Mentor at Youth CITIES**

March 2013 - Present

- Headed creation of 2 web applications that bring digital mentorship to early-stage ventures
- Advised Youth CITIES on program development and strategy; served as a student mentor for 200+ total students

# **HONORS/AWARDS**

• 1st Place Overall at the New England Botball Robotics Tournament

**April 2018** 

3<sup>rd</sup> Place at MIT Blueprint Hackathon

March 2017

Opening Speaker at the Massachusetts STEM Summit

Nov 2016

• 1st Place Overall at the Global Conference for Educational Robotics

**June 2015** 

## **SKILLS**

- Computer Science: Python, Python Scientific Libraries (Numpy, MatPlotLib, Pandas), Django, Psql, Javascript, Full-Stack Web Development, C, Java
- Machine Learning and NLP Libraries: Tensorflow, Keras, spaCy, NLTK
- Soft Skills: Event Organization, Team Management, Conflict Resolution, Public Speaking