#### ERIC R. CHEN

ericrc@mit.edu (510) 816-1385

#### **EXPERIENCE** IMPRO

#### IMPROBABLE AI GROUP

Fall 2019 – Present

Research Assistant – MIT CSAIL

Working with Prof. Pulkit Agrawal on novel reinforcement learning research in exploration and intrinsic curiosity for AI robots.

#### LEARNING AND INTELLIGENT SYSTEMS

Summer 2019 – Winter 2019

Research Assistant - MIT CSAIL

Researched ways to improve the performance of existing dynamic robotic motion planning and graph search algorithms using lazy heuristics.

#### LITTLE DEVICES LAB

Summer 2019 - Fall 2019

Research Assistant – MIT Edgerton

Designed simulation software from the ground up for a swarm robotics system capable of conducting autonomous biochemical synthesis procedures. Developed machine vision systems and data analysis procedures to test a novel biochemical synthesis platform in preparation for a NASA launch to the International Space Station. Applied machine vision to develop and deploy patient monitor reading software free of charge in hospitals worldwide.

## INTERACTIVE ROBOTICS GROUP

2018 - 2019

Research Assistant – MIT CSAIL

Implemented a learning model capable of predicting mismatches between autonomous agent behavioral policies in simulated and real world environments. and demonstrated results on a real robot car using ROS.

REV.COM Summer 2018

Software Engineering Intern

Developed full-stack features to facilitate automated speech-to-text transcription services for a wide range of users and clients worldwide. Designed solutions to issues relating to styling, search, and live update functionality.

## MARINE ROBOTICS GROUP

Spring 2018

Research Assistant - MIT CSAIL

Used machine learning to integrate visual obstacle avoidance into the Remote Explorer (REX) autonomous marine vehicle in preparation for the 2018 Maritime RobotX Challenge, Boston Harbor RoboChallenge, and the ongoing MIT Sea Grant Ocean Acidification project. Implemented and tested separate modeling approaches designed with data quality and availability in mind.

# **EDUCATION**

# MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Class of 2020

BS in Electrical Engineering & Computer Science

BS in Physics

#### **SKILLS**

Python, ROS, PyTorch, Tensorflow, Docker, Julia, C++, Java, C, C#, JavaScript, Bash, SQL, React/Redux, SolidWorks, Git, Affinity Designer

# **HONORS**

| MIT Emerson Scholar   | 2016 - 2018 |
|---|-------------|
| National AP Scholar   | 2016        |
| First Place in Highest Level (5) of the National French Contest | 2015        |
| USRowing Youth National Championships                           | 2014        |

### ADDITIONAL

| Special Olympics Coach, Brookline MA       | 2017 –Present |
|--|---------------|
| US Sailing Bareboat Cruising Certification | 2017          |
| MIT Varsity Men's Lightweight Crew         | 2016 –2017    |
| Oakland Strokes Varsity Men's Crew         | 2011 - 2016   |