# NICHOLAS CHARCHUT

ncha@mit.edu (310) 702-6238

# **EDUCATION**

# Massachusetts Institute of Technology

Cambridge, MA

Intended Bachelor of Science in the Department of Electrical Engineering and Computer Science

Class of 2019

Relevant Coursework - Differential Equations, Algorithms I, Programming I

Fall: Computation Structures, Artificial Intelligence, Math for Computer Science

#### Santa Monica High School

Santa Monica, CA

Valedictorian – 4.5/4.0 Weighted/Unweighted GPA, ACT: 34 – M: 35, E: 36, CR: 32, S: 32

Class of 2015

Relevant Coursework - Multivariable Calculus, Linear Algebra

#### EXPERIENCE

Nano Terra, Inc. Cambridge, MA

Software Engineer, R&D – Intern

Summer 2016 - Current

Developing graphical user interface for data collection by gas sensors.

Coordinating with electrical engineers to design new sensor prototype iterations.

Designing a data structure to efficiently update maximums among all channels over every time-step.

# Computer Science and Artificial Intelligence Lab

Cambridge, MA

Project Arco – Researcher

Winter 2015 - June 2016

Building a web crawler to obtain biological models with their respective metadeta for analysis.

Creating a cross-compiler to convert octave files to a unique dynamic problem solving language.

Legacy Effects, LLC San Fernando, CA

Three Dimensional Computer Modeling – Intern

Summer 2015

Utilizing a handheld scanner to create computerized scans of model objects.

Stitching various scans with Artec Studio to generate cohesive models for artistic manipulation.

Hour of Code Santa Monica, CA

Instructor at John Adams Middle School – Volunteer

Spring 2014

Leading weeklong classes of seventh grade students in instruction of key coding concepts.

Troubleshooting student projects with interactive examples.

# LEADERSHIP AND ACTIVITIES

Phi Beta Epsilon Santa Monica, CA

Network Administrator

Spring 2016 – Current

Maintaining and updating the fraternity website, implementing new features to enhance user experience.

Communicating with MIT administration to effectively resolve network issues.

Santa Monica, CA **Vacation Bible School** 

Physical Science Teacher — Volunteer

Summer 2011 - Summer 2015

Planning engaging lessons, demonstrations, and experiments that promote scientific understanding.

Inspiring and motivating elementary students to pursue careers in STEM fields.

#### Santa Monica Science Outreach

Santa Monica, CA

President of John Adams Middle School Division

Fall 2013 - Spring 2015

Establishing a volunteer organization that allows high school students to teach middle school students.

Collaborating with teachers to conduct seminars on the topics of physics, chemistry, and biology.

#### SKILLS