# 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 – 4.6/5.0 GPA

Class of 2019

Relevant Coursework - Algorithms I, Discrete Mathematics, Computation Structures

Spring: Computer System Engineering, Machine Learning, Systems Security

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

Developing graphical user interface for continuous live data collection by a network of integrated sensors.

Coordinating with electrical engineers to design new sensor circuitry and construct new prototype iterations.

Designing a cohesive data structure to efficiently categorize and perform live analysis for statistical purposes.

# 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.

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

Analyzing differential equation theory in order to more efficiently execute system equation solver.

# Legacy Effects, LLC

San Fernando, CA

Three Dimensional Computer Modeling – Intern

Summer 2015

Utilizing a handheld scanner and software 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 to help students gain coding intuition.

#### LEADERSHIP AND ACTIVITIES

# Phi Beta Epsilon Fraternity

Cambridge, MA

Network Administrator

Spring 2016 – Fall 2016

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

Communicating with MIT administration to effectively resolve network issues.

### Vacation Bible School Santa Monica, CA

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**