NICHOLAS CHARCHUT

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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, Software Construction

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

GrabCAD

Somerville, MA

Winter 2016 - 2017

Effected communication protocol with printer drivers to collect job images and create a stop-motion video. Created a computer vision model using various techniques (SURF, KAZE, BoF) to detect printer failures.

Nano Terra, Inc.

Software Engineer – Intern

Cambridge, MA

Software Engineer, R&D – Intern

Summer 2016

Developed graphical user interface for continuous live data collection from a network of integrated sensors.

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

Designed 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 – Spring 2016

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

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

Analyzed 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

Utilized a handheld scanner and software to create computerized scans of model objects.

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

LEADERSHIP AND ACTIVITIES

MIT Men's Varsity Baseball

Cambridge, MA

Pitcher

Fall 2015 – Current

Contributed to the team's winning effort in the regular season NEWMAC title in the Spring of 2016.

Providing mentorship to underclassmen on time management, work ethic, and general life skills.

Phi Beta Epsilon Fraternity

Cambridge, MA

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.

Vacation Bible School

Santa Monica, CA

Physical Science Teacher – Volunteer

Summer 2011 – Summer 2015

Planned engaging lessons, demonstrations, and experiments that promoted scientific understanding. Inspired and motivated elementary students to pursue careers in STEM fields.

SKILLS