Chetan Sharma

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EDUCATION

MIT
Candidate for BS in EECS
Minor in MechE
Expected May 2019 | Cambridge, MA
Cum. GPA: 4.3

WESTVIEW HIGH SCHOOL
Grad. May 2015 | San Diego, CA
Cum. GPA: 4.3

COURSEWORK

EECS
Machine Learning
Autonomous Vehicles
Algorithms
Software Construction
Control System Design
Signals and Systems
Analog Electronics Lab
Computation Structures

MECHANICAL ENGINEERING
Medical Device Design (Graduate)
Dynamics and Control
Mechanics and Materials
Mechanical Engineering Tools
MATLAB Numerical Computation
Differential Equations

SKILLS

Software Packages
ROS • Altium Designer • LTSpice • Solidworks • Autodesk Inventor • LabView • Flask • Pandas • Office

Programming Languages
Python • Java • MATLab • LaTeX • CSS • HTML • JavaScript

Fabrication
Machine Tools • NC Equipment • Board Fab

EXPERIENCE

NVIDIA CORPORATION | RF Validation Intern
May 2018 - August 2018 | Santa Clara, CA
- Created an internal analytics tool to automate RF data visualization
- Eliminated a large portion of the prior RF validation pipeline
- Took full ownership of a project while coordinating the needs of multiple users

DISTRIBUTED ROBOTICS LAB | Researcher
September 2017 - Present | Cambridge, MA
- Designed novel autonomous robot capable of 2D fabrication.
- Previously analyzed and optimized structure of shearing auxetic materials.
- Published paper on latter topic; expecting to publish paper on former this year.

AMAZON ROBOTICS | Global Operations Intern
May 2017 – August 2017 | Seattle, WA
- Optimized automation technologies with projected savings of $100,000
- Automated analysis on 200k data points to inform purchasing decisions
- Coordinated multiple disconnected groups to enforce standard practices

NASA JET PROPULSION LAB | Power Electronics Intern
May 2016 – Aug 2016 | Los Angeles, CA
- Created & tested power subsystems for Mars 2020 instrumentation
- Designed high-reliability switched regulators & sourced specialty components
- Performed failure mode analysis on high-reliability boards and assemblies

PERSONAL PROJECTS

BATTLEBOTS SEASON 4 COMPETITOR | Ongoing
Designing a 250lb combat robot for Discovery Channel's Battlebots television show (one of 90 teams accepted out of 100s). Managing design, construction, and funding of robot.

DORM KITCHEN CLEANLINESS WEB APP | July 2018 – August 2018
Created a secure Flask web application that allows dormitory residents to monitor kitchen cleanliness and identify individuals that leave behind dishes.

FACE-TRACKING AUTOMATIC VORTEX RING LAUNCHER | January 2018
Designed and programmed a 40lb machine that would track the faces of passerby and fire vortex rings in their direction. Project required extensive research into vortex ring formation theory. OpenCV, MATLAB, and Solidworks were used in design.

ROBOTIC HOTDOG VENDING MACHINE | January 2016
Built a fully automated hotdog vending machine during MakeMIT 2016. The machine was capable of cooking a hotdog, toasting a bun, and dispensing condiments without any human intervention. Won first place at MakeMIT.

AWARDS

2018	First Place	QVC Prize @ HackMIT Hackathon
2017	Third Place	Assistive Technologies Hackathon
2017	Third Place	MakeMIT Hardware Hackathon
2016	First Place	MakeMIT Hardware Hackathon