dangu@umich.edu

Education

Bergen County Academies

Hackensack, NJ

Academy for Engineering Design and Technology

June 2016

Project Lead the Way: Principles of Engineering, Computer Integrated Manufacturing, Int/Adv EE

University of Michigan, College of Engineering

Ann Arbor, MI

B.S.E in Aerospace Engineering

Expected April 2020

Intro to Aerospace Engineering, Intro to Computers and Programming, Multivariable Calculus

Work Experience

Intern at Recon Industrial Controls Corporation

Sept 2015 – June 2016

- Independent engineering contracting company developing/manufacturing electronic instrumentation, control
 hardware and software for industrial use
- Tested methods for a wireless serial link to the LabRecon board
- Ported LabRecon software to Linux using the WINE environment

Teacher's Assistant at City College of New York, Grove School of Engineering

June 2015 – Aug 2015

- Instructed and planned the curriculum for an intensive 6-week robotics class
- Covered basic Python, Unix command line, circuit theory, mechanics, and gen electronics to make a sumo robot Apprenticeship at Prince Electrical Contracting Corp.

 July 2016 – Aug 2016
 - Various roles in the creation of the Hilton DoubleTree at 350 W 40th St, NYC

Extracurricular Experience

MRacing Formula SAE (Project SOAR)

Sept 2016 - Present

- Transferred existing electronics documentation into Altium Designer Suite
- Redesigning electrical system to remove the need of a traditional wiring harness by routing onto a PCB instead Locating and Identifying Viable Asteroids (NASA ICED)

 Nov 2013 Nov 2014
 - Prototyped a device with Arduino, custom-made PCB to measure the magnetic permeability of an asteroid and estimate amount of water gained from harvest
 - Worked in collaboration with Kokutai-ji High School, sponsored by the Japanese Ministry of Education
 - Presented at the Super Science HS Convention, at the Hiroshima International Conference Hall

Rage in the Cage Robotics Competition

Nov 2013 – May 2014

• 3rd place overall; Rookie Championship win against teams such as Carnegie Mellon

Michigan Men's Glee Club; Bass I

Sept 2016 - Present

Leadership Experience

hackBCA: Chief of Staff

2014 - 2016

- Board member for the third iteration of hackBCA, one of the largest high school hackathons in the nation
- Coordinated staffing for the event (chaperone assignment, designation of day-of roles)
- Handled day-of events/logistics, tending to problems as they came
- Reached out to various schools, organizations to increase female attendance over 35%

Junior State of America (JSA): Director of Fundraising

2012 – 2015

- Reduced overnight convention costs by over \$100 per attendee, ended 2014 with over \$3000
- 2014 Junior State of America National Civic Impact Award

Class Council: Academy Representative | Student Council: 2016 Class Representative

2012 - 2016

Skills

Fluent in Mandarin; Microsoft Office; Adobe Suite CS6; Autodesk Inventor and CAD software; Altium Designer; Shop tools, machines (e.g. lathes, mills); Java (Basic), Python (Basic) C/C++ (Basic), Mathematica, MATLAB; Unix command line