

61 Chestnut Ridge Road, Holmdel, NJ 07733

Summary

High school senior interested in engineering and computer science. Experience with high-level research, robotics, and programming. Enjoys guizbowl, skiing, and implementing weird things in Haskell.

Skills and Knowledge

Software and Programming C, Python, Java, HTML/CSS/Javascript, IATEX, Git, GNU/Linux, Haskell

Autodesk Inventor, SolidWorks, 3D Printing **CAD Modeling and Prototyping**

> Languages English, Chinese, Latin

Education

High Technology High School

CLASS OF 2019

Ranked #1 STEM high school in the nation with all-honors, engineering-centric course offerings

Cumulative unweighted GPA: 99.08

Extracurricular Activity

Wearable Robotic Systems Laboratory, Stevens Institute of Technology

June 2018 - Aug. 2018

Sept. 2015 - present

RESEARCH INTERN Worked on 2 DOF haptic joystick with Professor Damiano Zanotto and other students at the lab

Designed and implemented tension distribution scheme and joystick prototype

Department of Mechanical Engineering, Tsinghua University

RESEARCH INTERN

June 2017 - Aug. 2017

- Designed and prototyped a novel robotic finger while studying in the lab of Professor Wenzeng Zhang
- US utility patent application no. 15831346 under USPTO review

MATE Ranger Class Underwater Robotics Competition

MECHANICAL LEAD | CORRESPONDING SECRETARY

Sept. 2016 - present

- Corresponding Secretary (2016-17) and Mechanical Lead (2017-19) for independent robotics team composed of local high school students
- Directed mechanics subteam in design, CAD modeling, construction, and documentation of underwater ROV

High Tech Academic Team

MEMBER AND PLAYER

Sept. 2015 - present

- Competed in local, state, and national guizbowl tournaments
- Designed and implemented automated scoresheet system and online hosting for statistics for High Tech student-run tournaments

Honors and Awards

2018	5th Place Technical Documentation, Ranger Class, MATE International Underwater Robotics Competition	Washington, USA
2018	2nd Place Overall, Ranger Class, MATE Regional Underwater Robotics Competition	Pennsylvania, USA
2018	1st Place Technical Documentation, Ranger Class, MATE Regional Underwater Robotics Competition	Pennsylvania, USA
2018	Summa Cum Laude, Gold Medal, National Latin Exam Level III	New Jersey, USA
2018	2nd Place Individual, 2nd Place Team, New Jersey Science League AP Physics I Competition	New Jersey, USA
2018	1st Place, TSA State Convention Engineering Design, Optical Engineering	New Jersey, USA
2018	Selected Oral Presenter, National Junior Science and Humanities Symposium	Maryland, USA
2018	2nd Place Paper, Student Presenter, Jersey Shore Junior Science Symposium	New Jersey, USA
2017	2nd Place Individual, 1st Place Team, New Jersey Science League High School Physics Competition	New Jersey, USA
2017	Summa Cum Laude, Perfect Paper, National Latin Exam Level II	New Jersey, USA
2016	Summa Cum Laude, Perfect Paper, National Latin Exam Level I	New Jersey, USA

Publications

• [in press] **Zheng, Eric** and Zhang, Wenzeng, 2018. "An underactuated PASA finger capable of perfectly linear motion with compensatory displacement". The Journal of Mechanisms and Robotics (doi: 10.1115/1.4041786)