

Eric Zheng

HIGH SCHOOL STUDENT

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Summary

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

Skills and Knowledge

Software and Programming	C, Python, Java, HTML/CSS/Javascript, \LaTeX , Git, GNU/Linux, Haskell
CAD Modeling and Prototyping	Autodesk Inventor, SolidWorks, 3D Printing
Languages	English, Chinese, Latin

Education

High Technology High School

CLASS OF 2019

Lincroft, NJ

Sept. 2015 - present

- 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

Hoboken, NJ

RESEARCH INTERN

June 2018 - Aug. 2018

- 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

Beijing, China

RESEARCH INTERN

June 2017 - Aug. 2017

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

MATE Ranger Class Underwater Robotics Competition

Marlboro, NJ

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

Lincroft, NJ

MEMBER AND PLAYER

Sept. 2015 - present

- Competed in local, state, and national quizbowl 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)