

# Eric Zheng

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## Education

**Carnegie Mellon University**  
B.S. IN COMPUTER SCIENCE

*Pittsburgh, PA*  
*Expected 2023*

**High Technology High School**  
CLASS OF 2019

*Lincroft, NJ*  
*Sept. 2015 - present*

## Skills and Knowledge

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

## Experience

**MITRE Quantum Information Science Group**  
INTERN

*Princeton, NJ*  
*Feb. 2019 - present*

- Studied linear algebra and quantum mechanics
- Programmed superconducting quantum computers with the IBM Qiskit framework

**Wearable Robotic Systems Laboratory, Stevens Institute of Technology**  
RESEARCH INTERN

*Hoboken, NJ*  
*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**  
RESEARCH INTERN

*Beijing, China*  
*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

*Marlboro, NJ*  
*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

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

## Publications

- **Zheng, Eric** and Zhang, Wenzeng, 2018. "An underactuated PASA finger capable of perfectly linear motion with compensatory displacement". *The Journal of Mechanisms and Robotics* **11**(1) [doi: [10.1115/1.4041786](https://doi.org/10.1115/1.4041786)]