# Jiarui Geng

Department of Mechanical Engineering,
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## EDUCATION

**The Pennsylvania State University** State College, United States
B.Sc. in Mechanical engineering (Concentrations: mechanical design, robotics, control) Aug. 2019 – May 2023
GPA: 3.47/4.00(PSU)

**The Pennsylvania State University** State College, United States
M.S. in Agricultural and Biological Engineering Aug. 2023 – Present

## SKILLS

**Manual Machine:** Machining, Woodworking, Welding
**Computer skills:** Solidworks with modeling, mechanic analysis, fluid simulation; MATLAB with simulation, Arduino; Arduino control; Raspberry pie; python.
**Material Extrusion 3D-printing with PLA materials:** Debug the 3d printer, design and optimize the product based on the self-supporting angle limit, Minimum Feature Size, Anisotropy, Surface Finish.
**Expertise:** machining, mechanic analysis, simulations.

## AWARD AND HONORS

1. Second Prize (Standard Robot Confrontation) & Second Prize (3V3 Robot Confrontation), Robomaster 2022 University League North American. Jun. 2022
2. Third Prize (Standard Robot Confrontation), IEEE 2022 International Conference on Robotics and Automation (ICRA) & Robomaster University AI Challenge 2022. May 2022

## PROFESSIONAL EXPERIENCES

**Honey Bee and Pollinator Research** (Advisor Christina Grozinger, Vijaykrishnan Narayanan, Harland Patch)
Design and fabrication of insect collection devices. Jan. 2023 - Present

**Capstone: Ms. Dolly's Safety Net**
Preventing pediatric vehicular heatstroke Aug. 2022 – Dec 2022
1. Design and produce experimental models
2. Coding
3. Financial management.

**IEEE 2022 International Conference on Robotics and Automation (ICRA)** May 2022

**Department of Mechanical Engineering, Penn State University** State College, United State
Mechanical Group leader to Robo X Club (Advisor Prof. Satadru Dey) Dec. 2021- May 2023
1. Design and build the mechanical parts of the Hero Robot and participate in the design and build of the Standard Robot and Sentry Robot.
2. Designing and Integrating the circuitry and Components of robots together with the Embedded system group.
3. Training new members (Solidworks, Machining).

## ADDITIIONAL EXPERIENCE

**University Police, Penn State University** State College, United State
Auxiliary Police May 2022 – Aug. 2023
**Penn State University** State College, United State
Member of Amateur Radio Club (Advisor Prof. Rick Gilmore) Jan. 2022 – May 2023