
EDUCATION

Stanford University – Palo Alto, CA

- Candidate for Master of Science in Mechanical Engineering; Depth: Robotics & Kinematics *expected Mar 2026*

Georgia Institute of Technology – Atlanta, GA

- Bachelor of Science in Mechanical Engineering | GPA: 3.82 / 4.00 *May 2024*
- Minor: Computing & Theory (CST); Concentration: Automation and Robotics

EXPERIENCE

Center for Tutoring & Learning, Stanford University, *Subject Tutor*

Sept 2024 – Present

- Adapted content to 30+ students' needs, resulting in multi-grade improvements in Physics, Math, and ME.

ME Department, Georgia Tech, *ME 3180 Machine Design Teaching Assistant*

Aug 2023 – May 2024

- Tailored content to the diverse needs of 300+ students', resulting in multi-grade improvements in machine design.

Proteor USA, *R&D Engineering Intern*

June 2023 – Aug 2023

- Designed an automated flow test and mechanical fixture to characterize over ½ million voice coil valves per year for prosthetic knee production compliance. Reduced manual testing time from 45 minutes to 20 seconds.
- Performed system ID on custom voice coil valves and assisted nonlinear controller design, enhancing steady-state response by 20% and transient response by 31%. Redesigned and tested frame/sensors with cross-functional team.

Tutoring & Academic Support, Georgia Tech, *Mentor, 1-to-1 Tutor & Physics Help Desk Tutor*

Jan 2022 – Aug 2023

- Advised and managed tutors, lead weekly training meetings to improve tutor's leadership and communication skills.
- Adapted content to 200+ students' needs, resulting in multi-grade improvements in Physics, Math, CS, and Mechanics.

RESEARCH

Exoskeleton Controller Design, *Biomechanics Laboratory*

Dec 2024 – Present

- Designing a novel exoskeleton controller that assists the ankle joint for stroke patients.

Visual-Tactile Sensing of Object Properties, *Assistive and Robotics Manipulation Laboratory*

Oct 2024 – Present

- Building a Bayesian GNN model to fuse RGB-D and DenseTact tactile sensing to detect object mechanical properties.

Agile Locomotion & Manipulation, *Laboratory for Intelligent Decision and Autonomous Robots*

Dec 2021 – May 2024

- Commanded Digit robot to demonstrate hardware box pick/place scenarios with 37% more successful human interactions, using whole-body kinematics and multi-body non-linear dynamics with real-time data.
- Designed and fabricated/prototyped a 3DOF attachable gripper with Gelsight sensor embedded system.

PUBLICATIONS & DISSERTATIONS

[T1] Rohan Punamiya. Slip in Bimanual Gripping of Deformable Objects with Gelsight Hybrid Adhesion. Undergraduate Research Option Thesis, Georgia Institute of Technology, May 2024.

HONORS, AWARDS & CERTIFICATES

2024 Engineer In Training. *Georgia State Board of Registration for Professional Engineers*

2023 President's Undergraduate Research Award. *Georgia Institute of Technology*

2022 CRLA International Tutor Training Program Certification (ITTPC). *Georgia Institute of Technology*

LEADERSHIP

RoboJackets Club Autonomous Racing Team, *Mechanical Team Lead*

Aug 2021 – Dec 2023

- Supervised the design and installation of various car mechanisms, including a redesign of the braking system, car controls, and a new Ackerman steering mechanism. Each system worked smoothly in the annual AKS competition.
- Managed mechanical team and collaborated with electrical/software team, completed assembly installation on time.

SKILLS

Software: CAD (SolidWorks, Inventor, Fusion360), CFD, Arduino, LabView, MS Office (Word, Excel, PowerPoint)

Programming: MATLAB, C/C++, Python, PyTorch, ROS, Linux, Julia, Java, SQL, PHP, Bash, Git, BitBucket

Hardware: Waterjet, 3D Printer, Laser Cutter, Lathe, Mill, MTS Machines, ESD Testing, STM32, MSP432, myRIO