

Arya Bhangale

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EDUCATION

Purdue University, College of Engineering <i>Bachelor of Science in Engineering, Intended Major: Mechanical Engineering</i>	West Lafayette, IN 2025-2029
West Windsor Plainsboro High School South <i>GPA: 3.79 UW, 4.23 W</i> <i>National Honor Society / Red Cross Club / South Asian American Student Association</i>	Princeton Junction, NJ 2021-2025

EXPERIENCE

Purdue ASME Biomechanics <i>Onboarding Team Member</i>	<i>Aug 2025 – Present</i>
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- Works with a team of over 30+ students to prototype and design a prosthetic hand using Autodesk Fusion.

Purdue Vertically Integrated Project (VIP) Humanoid Robot Team <i>Mechanical Team Member</i>	<i>Aug 2025 – Present</i>
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- Contribute to mechanical subsystem design for a full-scale humanoid robot, including CAD modeling (ex. SolidWorks) and structural analysis.

FIRST Robotics Competition, Team 1923 (The MidKnight Inventors) <i>Mechanical Captain, Robot Operator</i>	<i>Sep 2021 – May 2025</i>
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- Designed and prototyped mechanical subsystems in SolidWorks and Onshape for competition robots. (ex. reverse four bars, swerve drive, etc.)
- Trained 150+ new members in machining, CAD, and lab safety.
- Led pit crew operations and troubleshooting during competitions throughout a season of 3 months.
- Managed \$4,000+ fundraising and represented team in outreach presentations.

New York University Langone Hospital <i>Cardiothoracic Research Intern</i>	<i>Jun 2023-Jul 2023</i>
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- Observed robotic-assisted surgical techniques and thoracic procedures. (ex. da Vinci Surgical System)
- Conducted research on integrating robotics in cardiothoracic surgery.
- Collaborated with interdisciplinary healthcare teams to optimize patient care.

LEADERSHIP & INVOLVEMENT

Youth Suicide Prevention Associates – NJ Department of Health <i>Youth Planning Committee Member</i>	<i>May 2024 – Aug 2025</i>
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- Designed and implemented curriculum promoting mental health awareness.
- Coordinated students and teaching assistants to foster open discussions.
- Encouraged peer support and community engagement around wellness.

SKILLS

- Technical: CAD (SolidWorks, Onshape, Autodesk Fusion, NX), Java, Robotics, Mechanical Prototyping
- Tools: Microsoft Office, Video Editing
- Soft Skills: Leadership, Project Management, Team Collaboration

AWARDS & ACHIEVEMENTS

- FIRST Dean's List District Championship Semi-Finalist (2024) - *recognized for technical leadership and innovation.*
- FIRST Robotics Competition World Championship Creativity Award (2024)
- FIRST Robotics Competition Engineering Inspiration Award (2024)
- FIRST Lego League Mentor Award Nominee (2024)