DIVYA WADHWA

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EDUCATION

PURDUE UNIVERSITY West Lafayette, IN
Bachelor of Science in Mechanical Engineering May 2028
GPA: 3.93

TECHNICAL SKILLS

SolidWorks, Python, MATLAB, AutoCAD, 3D Printing, Excel, Microsoft 365, Cytoscape.

WORK EXPERIENCE

Biotechnology Research Mentee Remote
Unherd.in Apr 2023 – Jul 2023
- Analyzed 40+ scholarly sources on miRNA targets and disease networks in Diabetes Mellitus
- Synthesized findings into a comprehensive report featuring infographics to enhance visual communication
- Completed a 6-hour NIDA certification in clinical trial procedures and wet lab protocols

Biomechanics Team Engineer WL, IN
American Society of Mechanical Engineers (Purdue Chapter) Jan 2025 – May 2025
- Collaborated in a 4-member team to design and fabricate a functional prosthetic hand addressing real-world accessibility challenges
- Prototyped components for user testing, with final product delivered May 2025

Undergraduate Teaching Assistant, ENGR 133 "Transforming Ideas to Innovation" WL, IN
Purdue University, School of Engineering Education Jan 2025 – Present
- Supported instruction for 100+ first-year engineering students across two lab sections; led weekly sessions, assisted with MATLAB, Python, and Excel, and provided one-on-one help during office hours
- Graded assignments via Gradescope, and enhanced student performance through targeted support

Regional English & Math Tutor, Chapter Supervisor Remote
Each One Teach One (NGO) Apr 2022 – Jun 2023
- Conducted 50+ tutoring sessions for 23 underprivileged learners across India, focusing on conversational English and pre-calculus mathematics.
- Designed tailored learning materials, assigned 30+ homework tasks, and conducted 10 formal assessments

UNIVERSITY PROJECTS

ENGINEERING PROJECTS IN COMMUNITY SERVICES (Inogen) Aug 2024 – April 2025
- Built a functional oxygen concentrator using zeolite beds, spirometers, and compressors for a medical repair firm
- Conducted data validation and prototype testing to ensure device reliability and airflow accuracy

MATLAB PROJECT Aug 2024 - Dec 2024
- Designed and programmed a 200+ line political quiz application with real-time score tracking and visual output
- Integrated MATLAB's Computer Vision Toolbox to display dynamic result videos based on quiz responses

PYTHON PROJECT Aug 2024 - Dec 2024
- Co-developed a 500+ line Python encryption/decryption tool using XOR Cipher to hide/retrieve text within image pixels
- Managed image processing functions and edge case handling to ensure code robustness