Pranav Gupta

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As a current college student pursuing dual majors in Mechanical Engineering and Computer Science, my objective is to leverage my strong analytical skills and interdisciplinary knowledge to contribute to innovative projects and solutions. With a proficiency in deconstructing complex problems and synthesizing diverse solutions, I am committed to optimizing designs and enhancing project outcomes. My aim is to apply my expertise and passion for problem-solving to make meaningful contributions in a dynamic professional setting.

Education

Duke University
August 2023 - May 2027

Bachelor of Engineering
Durham, NC

- **GPA:** 3.6 of 4.0
- **Relevant Coursework:** EGR121, PHYSICS152, MATH219, CS201, MATH218, EGR101

Experience

The George Washington University
May 2024 - Present

AI/ML Researcher

- Developed an algorithm for Vison-Based Perception with Safety Awareness for UAS Autonomous Landing
- Evaluated a training dataset for the algorithm which included gathering and labeling data

Duke University
Janaury 2024 - Present

LabRAT

- Advised 30+ engineering students on various academic projects for EGR101 and EGR121.
- Maintained 3D printers, Laser Cutters, and CNC Mills for student use.
- Organized various shop tools to streamline student workflow and project completion.

Duke Motorsports
September 2023 - Present

Powertrain Engineer

- Designed and Manufactured a Custom Oil Pan which increased vehicle oil pressure by 50%.
- Manufactured a Custom Fuel Rail using CNC milling which improved overall Engine Fueling.
- Built Engine Dyno setup to gather more accurate Engine Data to use in tuning, which increased performance by 20%.

Valence Robotics
September 2023 - Present

Mentor

- Advise a team of 50 high school students in building a robot for the FIRST Robotics Competition.
- Taught students how to use various tools such as: Drills, 3D Printers, CNC Mills/Routers, and Waterjets.
- Guided robot design and helped students incorporate good engineering practices to build safer, more competitive robot.

Oystilter
December 2021 - January 2024

Founder

- Engineered custom submersible device that is capable of removing over 50% of phosphorus and nitrogen in natural waterways.
- Devised a unique filtration method that is capable of filtering flowing water without electricity.

CodefyCS
December 2020 - January 2024

Executive Director

- Reached over 1000 students across the globe, providing them with free coding lessons
- Coached 100+ student mentors in teaching various different coding classes.
- Streamlined volunteer workflow by creating a custom portal for logging hours.

Kumon Learning
May 2019 - January 2023

Tutor

- Assessed students educational gaps and identified preferred learning styles.
- Developed personalized improvement plans for students learning high school/college level Math resulting in quicker progression.
- Optimized data-entry workflow, doubling the amount of student worksheets that could be recorded in the same time period.

Awards

Diamond Challenge - Semifinalist Entrepreneurship Competition, One of 50 out of 600 teams **January 2022**
MIT THINK - Honorable Mention Research mentorship program promoting student-led innovation in STEM **February 2022**
Taco Bell Ambition Accelerator - Semifinalist Entrepreneurship Competition, One of 25 out of 500 teams **September 2022**
Presidential Volunteer Service Award - Silver Achieved by Volunteering for over 200 hours. **October 2022**