# Meerav Shah

(814) 280-8312 | meeravshah29@gmail.com | sites.google.com/psu.edu/meeravshah | www.linkedin.com/in/meeravshah/

## **EDUCATION**

# The Pennsylvania State University

College of Engineering | Bachelor of Science in Computer Science

Eberly College of Science | Minor in Astrophysics

## **WORK EXPERIENCE**

Perplexity Penn State University, PA

Campus Strategist - Penn State

January 2024- Present

University Park, PA

Graduation: May, 2026

Dean's List: 2 Semesters

Led 'Race to Infinity' campaign driving 774 total sign-ups (157 direct) with a 58% increase in sign-ups in the closing stages.

# **Academic Advising Chatbot**

Penn State University, PA

June 2024 - Present

- Developed an academic advising chatbot using commercial LLMs and APIs for the College of IST to assist students with course selections and academic queries, reducing student advising load by 35% with 74% more details.
- Published a research paper for ACM SiGCSE(2025) on the development, implementation, and impact of the academic advising chatbot, its influence on students and its relevance in the current academic landscape.

## **Autonomous UAV Research Project - MCREU**

Undergraduate Researcher, Primary Investigator

Penn State University, PA

June 2024 - August 2024

Undergraduate Researcher, Primary Investigator

- Conducted research on the impact of cloud and icing conditions on UAV performance using torque & RPM data: +/- 25%.
- Developed a methodology to monitor UAV propeller performance using onboard computers, and data analysis.
- Analyzed data to understand cloud properties, including water content and droplet volume, and their effects on UAV systems.
- Proposed future research directions focusing on real-time data processing algorithms to mitigate icing effects on drones.

#### IST 130 - Intro to AI and ART

Penn State University, PA

Lead Learning Assistant, IST 130

January 2024- Present

- Leading a team of 14 Learning assistants, managing grading, correspondence, and class operations.
- Trained and mentored 20 LAs, designed coursework and created documentation for future semesters and possible handover.
- Curated a list of Artificial Intelligence tools useful for the class; added more than 68 unique AI tools, categorized them by type, and added reviews for ease of access, to be shared with >400 students each semester.

# Autonomous Vehicle Research Project - HTI Lab

Penn State University, PA

Undergraduate Researcher

September 2023 - May 2024

- Assisted in conducting a driving simulator experiment to investigate how drivers behave when they interact with Autonomous and Human-driven vehicles on the road with varying amounts of market penetration 25%, 50%, 75% & 100%.
- Helped streamline the Experiment design and learned how to write code and documentation for the simulation scenarios in the proprietary software for STISIM3's driving simulator, and created 4 new simulation environments.

# PROJECTS & CLUB EXPERIENCE

# NASA Big Idea Challenge 2024 [SSPL]

Team Lead; Researcher

Penn State University, PA

October 2023 - February 2024

- Led a team of 15 individuals in the annual Big Idea challenge, under faculty guidance, working towards the development of a groundbreaking inflatable technology project to 3d print on the moon using lunar regolith & proprietary NASA systems.
- Collaborating with faculty advisors & industry experts and using cutting-edge research facilities on campus to engineer end-to-end systems that facilitate additive construction on the moon using lunar regolith.

Student Space Programs Laboratory - [SSPL] Member

September 2023- Present

- Learnt how to build a functioning Payload for a low-flight rocket on a 3-month timeline following PDR & CDR Reviews
- Programmed the entire payload system through rapid prototyping started with the ConOps logic stage and used standard Arduino IDE based on C# to write code to collect 6 real-time datapoints and visualize based on mission-specific conditions.

Electrobotics Ahmedabad, India

Intern, Robocon Team Lead

September 2019 - October 2019

Collaborated with a team of 3 students and 2 advisors to design highly advanced prototypes for a 4-wheel AWD system and a 4-axis robotic arm, leading to recognition for creativity and technical expertise in drone engineering.

# **SKILLS & INTERESTS**

**Skills:** Programming languages (Python, Java, C, C++, C#, HTML/CSS, SQL), MS Office, Cloud Computing, GPU, MySQL, Data science, Linux, Unix, database management, PyTorch, product design, backend, end-to-end, cross functional, customer needs, market analysis, critical thinking, agility, problem-solving, Customer Service, GitHub, Version Control, JavaScript, NoSQL, Excel, NumPy. Soft skills(effective communication skills, attention to detail, decision-making, team player, growth mindset, ), Product features. **Interests:** Project management, Space Systems Engineering, Artificial Intelligence, Machine Learning, Computer Vision, Deep Learning, product management, DevOps, front-end, full-stack, IoT, API, Statistics, Source Code, computer vision, open source.