

Shraddhaa Mohan

shraddhaa.mohan@gmail.com | Mobile: +1 630-914-0094 | LinkedIn: shraddhaamohan | Github: shraddhaamohan

EDUCATION

- **University of Illinois - Urbana-Champaign** Urbana-Champaign, USA
Master of Computer Science; GPA: 3.91/4.0
Aug 2024 – May 2026
Coursework: Principles of Safe Autonomy, Autonomous Vehicle Engineering, Deep Learning for Computer Vision, IoT
- **SSN College of Engineering, Anna University** Chennai, India
Bachelor of Engineering in Computer Science and Engineering; GPA: 9.15/10.0
Aug. 2017 – July 2021
University Rank: #14, College Rank: #7

EXPERIENCE

- **Scenix.ai** New York, USA
Member of Technical Staff
July 2026 – Present
 - * Built a unified policy rollout architecture (sim/real) with a prefetch inference worker separating action-chunk prediction from step-level execution, reducing closed-loop control latency.
- *Robotics Research Intern* June 2025 – May 2026
 - * Built a generic SimulatedRobot interface (MuJoCo) with end-effector and joint-space control, supporting 4 robot platforms and designed for extension to new embodiments.
 - * Built a per-tick logging service capturing policy actions, observations, and timing during robot rollouts, and used it to diagnose deployment policy failures when transferring to new environments.
 - * Owned containerized deployment of multiple end-to-end autonomous pipelines via Docker Compose and ECR.
 - * Deployed an autonomous manipulation system on the Flexiv arm using ROS2, integrating motion planning, perception, task execution, system logging, and visualization.
 - * Built accelerated perception nodes using Isaac ROS and Isaac ROS NITROS (Foundation Stereo, Foundation Pose, YOLOv8) to bring foundation-model-based perception into a real-time robotics pipeline.
- **RoboPIL Lab** Champaign, USA
Graduate student researcher
Jan 2025 – May 2025
 - * Developed algorithms for 6-DoF object tracking by leveraging optical flow, predicted image tracks and monocular depth estimation from generated videos, followed by perspective-n-point/least squares optimization for precise pose estimation.
- **Goldman Sachs** Bengaluru, India
Engineering Analyst/Associate
Aug 2021 – July 2024
 - * Led the design of an internal npm package, "In-App Adjustments" (uses React) which includes bulk adjust, auto-population, and copy-down functionalities, significantly enhancing workflow efficiency, reducing manual adjustment time by 40-50%.
 - * Enhanced the "Exception Workflow" in Conrad by correlating large datasets and adding guided user workflows. Reduced manual investigation time by 40% by streamlining user decision-making, and minimizing errors in handling exceptions.

RESEARCH: POSTERS, PUBLICATIONS AND TALKS

- **Robotic Manipulation by Imitating Generated Videos Without Physical Demonstrations(RIGVID)**: Paper accepted at ICLR 2026, and presented at CVPR FMEA Oral 2025 and CORL LEAP Spotlight 2025. Website here.
- **Food Recognition Benchmark for Instance Segmentation tasks**: Talk and Presentation at Applied Machine Learning Days (AMLD) Conference, 2021. Presentation here and slides here.

PROJECTS

- **GEM Autonomous Driving**: Led design of RRT/RRT* based path planning for obstacle avoidance and GPS-based autonomous navigation on GEM e2/e4 vehicles (Real/Gazebo sim). Video here.

PROGRAMMING SKILLS

- **Languages**: Python, C++, Java, JavaScript, C, HTML, CSS, SQL
- **Frameworks and Technologies**: Pytorch, ROS, Docker, React, Redux, Three.js, GraphQL, Kubernetes

ACHIEVEMENTS

- **Winner, Most Innovative Solana Application Award, HackIllinois**: Mar 2025
- **Winner, Judges Choice Award, Nasa Space Apps Chicago Hackathon**: Oct 2024