

Sai Haneesh Allu

Personal Information	Ph.D. Candidate	saihaneehallu.github.io
	Intelligent Robotics and Vision Lab (IRVL) The University of Texas at Dallas, TX, 75080	labs.utdallas.edu/irvl/ +1(945)213-9459
Education	The University of Texas at Dallas, TX, USA	<i>2022 – Present</i>
	Ph.D. in Computer Science Advisor: Dr. Yu Xiang	
	Indian Institute of Technology, Delhi, India	<i>2018 – 2020</i>
	M.Tech in Control Systems Advisor: Dr. Shubhendu Bhasin	
	National Institute of Technology, Warangal, India	<i>2012 – 2016</i>
	B.Tech in Electrical and Electronics Engineering	
Skills	Python, ROS, PyTorch, OpenCV, Gazebo, MATLAB, Simulink, Ardupilot, Git, Java3D, C, C++	
Experience	<u>VECROS Technologies</u>	
	Co-Founder and CTO	<i>Jan '20 – Nov '21</i>
	<ul style="list-style-type: none">Developed edge computed autonomous aerial point goal navigation system using Intel D430 modules and T261. Led the team in developing and testing autonomous perception-based control of multirotor systems for deep surveillance applications.Trained and deployed custom neural networks on multirotor systems to identify roadworks anomalies while remotely controlling the aircraft through the internet for beyond visual line of sight operations.	
	<u>Sterlite Tech</u>	
	Operations Engineer	<i>Jul '16 – Aug '17</i>
	<ul style="list-style-type: none">Conducted a comprehensive analysis of the fiber spool changeover process and developed a grounding mechanism to discharge static charges affecting the feedback system in the fiber draw mechanism.	
Publications	* denotes equal contribution and joint lead authorship.	
	Autonomous Exploration and Semantic Updating of Large-Scale Indoor Environments with Mobile Robots	
	Sai Haneesh Allu, Itay Kadosh, Tyler Summers, Yu Xiang <i>Under submission to International Conference on Robotics and Automation (ICRA), 2025.</i>	
	Grasping Trajectory Optimization with Point Clouds	
	Yu Xiang, Sai Haneesh Allu, Rohith Peddi, Tyler Summers, Vibhav Gogate <i>In IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2024.</i>	
	SceneReplica: Benchmarking Real-World Robot Manipulation by Creating Replicable Scenes	
	Ninad Khargonkar*, Sai Haneesh Allu*, Yangxiao Lu, Jishnu Jaykumar P, Balakrishnan Prabhakaran, Yu Xiang <i>In International Conference on Robotics and Automation (ICRA), 2024.</i>	
Awards and Recognitions	Prof. A.K. Sinha Award, IIT Delhi	<i>May '20 – Jun '20</i>
	Received for achieving the highest CGPA among 140 graduate students.	
	Best Teaching Assistant Award, IIT Delhi	<i>Jul '19 – Aug '19</i>
	Awarded for effectiveness in assisting faculty and mentoring students in various courses.	
	Special Award, Sterlite Tech	<i>Jul '16 – Dec '16</i>
	Received for quick learning and independent handling of the shift (among 80 employees).	
	Spot Performance Award, Sterlite Tech	<i>Feb '17 – Mar '17</i>
	For implementing a variable speed module for uniform fiber draw	