Chidre Shravista Kashyap

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Summary _____

I am a passionate robotics researcher with 2+ year of academic experience and devoted to delivering quality robotic applications for the industry and people. Reliable team player with a positive communication mode and possess the capacity to support the group in tackling technical glitches.

🗲 Education _____

Doctor of Philosophy (PhD) in Cyber Physical Systems , Indian Institute of Science Advisor: Dr Jishnu Keshavan, Co-Advisor: Dr Pushpak Jagtap	2023-Present Bengaluru
M.Tech in Mechanical Engineering, Defence Institute of Advanced Technology2020-2022Specialization: Robotics (8.53/10.00 GPA)PuneThesis: Vision-Aided Intelligent Manipulation and Control of Humanoid Robotic ArmPune	
B.Tech in Mechanical Engineering , Maulana Azad National Institute of Technology	2015-2019
Thesis: Failure prediction of Pressure Vessels using Finite Element Analysis (6.90/10.00 GF	PA) Bhopal
Intermediate Public Examination (XII)	2013-2015
Sri Chaitanya Junior Kalasala (96.50%)	Hyderabad
SSC (X)	2013
Sri Chaitanya Techno School (9.5/10.0 GPA)	Hyderabad

Work Experience

Autonomous Logistics Technologies Pvt Ltd. (ALOG[®])

Internship

- Deployed and troubleshot the autonomous mobile robot for smooth operation at a client location.
- Developed Safety features to meet international safety standards of AMR using several sensors to prevent collisions with obstacles.

ISRO Inertial Systems Unit

Project Student

Thiruvananthapuram July 2021 - May 2022

BITS Pilani, Hyderabad May 2018 – July 2018

September 2022 - December 2022

Hyderabad

- **Problem**: Estimation of six degrees-of-freedom pose of the Humanoid Robotic Hand to track its position and orientation for effective manipulation with the aid of semantic segmentation and contour matching techniques.
- **Impact**: The accuracy of the method improvised to error of 0.8° in orientation and 6 mm in translation.
- Assisted the scientist in conducting several experiments and improved the accuracy of fiducial markerbased pose estimation through data-driven calibration methods by *15%*.

Ezenith - Empowering Education

DRONE Development Internship

- The entire period got exposed to Drone Development leveraging Ardupilot and Mission Planner.
- Researched on Ornithopter, and compared the flight performance between fixed-wing aircraft and Ornithopter.

🛢 Skills_____

Programming Languages	MATLAB, Python, C++ (Basic)
Softwares / Libraries	SOLIDWORKS, ROS, Blender, Gazebo
Tools	Linux, RaspberryPi
Certifications	Deep Learning Specialization (Coursera, 2022)
	Robotics: Estimation and Learning (Coursera, 2021)
	Robotics: Computational Motion Planning (Coursera, 2021)
	ROS for Beginners path (The Construct, 2020)

🌣 Projects _____

StackBot - Differential Drive Robot

August 2023 - April 2025

 StackBot was developed as an Education Kit for a course CP212 taught during academic year 2023-24 & 2024-2025 at Robert Bosch Centre for Cyber-Physical Systems, Indian Institute of Science. (https://shravista.github.io/portfolio.html)

Conferences / Publications _____

Shravista Kashyap, Jyothish M., "Calibration and error compensation of vision-based pose estimation of humanoid robot hand", in proceedings of National Conference on Artificial Intelligence Enabled Aerobots and Hydrobots (ASET 2022). https://bit.ly/3WTgXhp

& Key Courses

- ✤ Mathematics
- Non-Linear Systems and Control
- Robot Kinematics and Dynamics
- Robot Sensors, Actuators and Drives

Extra-Curricular Activities

- I was a peer reviewer for the journals International journal of robust and nonlinear control and IEEE transactions on systems, man, and cybernetics.
- ✤ Given a tutorial session on "Robot Modelling and URDF Export from SOLIDWORKS" at Defence Institute of Advanced Technology, Pune. *February 4, 2022*
- Student Volunteer at ACM/IEEE International Conference on Human-Robot Collaboration.

March 9-11, 2021

2016 - 2017

- * Rajbhasha Karyanvyan Samithi, Member.
 - Led a 5-person team to conduct an event named Khichdi in Tooryanaad; a big Hindi festival held once every year and conducted a workshop for non Hindi speaking students for about four weekends.
- Participation in Full Throttle Competition at IIT Bombay.

December 2015