ANIRUDH GOVIL

anirudhgovil2002@gmail.com LinkedIn Github

EDUCATION

B.Tech. with Honours in Computer Science and Engineering

2020-2024

International Institute of Information Technology, Hyderabad

CGPA 9.03/10

Relevant Coursework: Statistical AI, Mobile Robotics, Computer Vision, Graph Deep Learning, Advanced NLP, Reinforcement Learning

Activities: Coordinator of the IIIT Music Club(2021-2023), Quiz Club(2020-2022) and Debate Society (2021-2023). Handled finances (upto 2 lakhs), logistics and marketing and for multiple events a year.

SKILLS

Languages & Frameworks

Python (Pytorch, Tensorflow, Open3D, OpenCV), C++(ROS, STL), C(Arduino, OS), Javascript(MERN Stack)

EXPERIENCE

Computer Vision Research Engineer

May 2024 - Present

DreamVu

Hyderabad

• Working on improving the safety of robotic applications for the PAL series of omni-directional stereo cameras.

Computer Vision Intern

Game Theory

Dec 2023 - May 2024 *Huderabad*

• Performed camera calibration, shuttle detection, triangulation, interpolation and trajectory generation to track the trajectory of fast-moving objects using basic cameras and edge devices.

Research Student

August 2022 - Present

Robotics Research Centre

IIIT-Hyderabad

• Semantic Segmentation and Navigation of 3D Indoor Scenes, IIIT-H RRC, MIT CSAIL
We segment indoor environment pointclouds into semantically significant zones, that can later be queried in
natural language. Our work will be an Oral Presentation at IROS 2024 and poster at a CVPR 2024
Workshop. I am supervised by Prof. Madhava Krishna

Grasping in Cluttered Environments, IIIT-H, University of Minnesota RPM Lab Investigated Sampling based MPC in cluttered environments and Visual Servoing for Robot Handover.

Precog IIIT-Hyderabad

• Improving Hinglish Code-Mixing for LLMs, IIIT-H

LLMs tend struggle in code-mixed tasks. We attempt to improve their performance using our unique data-sets and improve cross-lingual understanding using code-mixed data. Our work is under review at TALLIP 2024

• Investigating OCR In VLMs. IIIT-H PreCoq

We design probes to test and characterise CLIP's ability to recognise characters and the semantics of text in scenes. Under review at a *NeurIPS 2024 Workshop*

PROJECTS

Improving Factual Consistency for Abstractive Summarisation

Monsoon 2023

Used a Q&A based consistency metric to fine-tune a seq-seq BART model to produce factually consistent summaries.

Low Light Image Enhancement using U-Nets with Attention

Spring 2023

Added attention blocks and pruned the U-Nets to achieve better denoising and colour correction.

Neural Architecture search on Graphs

Spring 2023

Automated finding an optimal GNN for a given dataset by pruning a super-graph and introducing cross connections.

Stereo 3D Reconstruction Monsoon 2022

A Structure from motion pipeline rebuildS a 3D environment using a stereo camera. An interactive interface lets you test out various filters and algorithms and compare their performance in real time.

AWARDS

- Megathon 2022 Winner: Won both rounds of the Stellantis Hackathon and a 1.8 lakh cash prize. Created an environment mapping pipeline for cars using Block-NeRFs.
- PM Foundation Fellowship: 1 of 10 students (internationally) awarded a scholarship to cover college tuition. Based on an open written test and interview round by Indian Administrative Service Officers.
- IIIT-H Dean's Merit List 2021 and 2022: For ranking in the top 15% of class in my first and second year
- IIIT-H Dean's List 1 2023 and 2024: For ranking in the top 5% of class in my third and fourth years