ANIRUDH GOVIL

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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), C, Javascript(MERN Stack)

EXPERIENCE

Computer Vision Research Engineer

May 2024 - Present

DreamVu

Huderabad

• R&D on image processing, stereoscopic depth detection & semantic segmentation for robotic vision.

Computer Vision Engineer

Dec 2023 - May 2024

Game Theory

Hyderabad

• Camera calibration, object detection using a custom-finetuned model, triangulation, interpolation and trajectory generation to track fast-moving objects using basic cameras and edge devices.

Research Student

August 2022 - May 2024

IIIT-Hyderabad

Robotics Research Centre

• Semantic Segmentation and Navigation of 3D Indoor Scenes, IIIT-H RRC, MIT CSAIL

We segment indoor environment point clouds into semantically significant zones, that can later be queried in natural language. Or al Presentation at *IROS 2024 and poster at a CVPR 2024 Workshop* . I was 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 PreCog

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