Ishan Nangia

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EDUCATION

Sri Venkateswara College, Delhi University

Bachelor of Science (Honors) in Statistics

CGPA

Delhi Public School, Sec-45

C.B.S.E (Class XII)(Commerce)

Percentage

Delhi, India 2016 - 2020

8.43/10

Harvana, India

2014 - 2015

96%

Selected Work Experience

Computer Vision Researcher | Technology for Wildlife Foundation

Dec 2023 - Jun 2024

- Designed and implemented SOTA computer vision pipelines for wildlife conservation firms across India
- Designed pipeline to collect primary data, merge drone and satellite data, and produce geospatial degradation maps for restoring a 44+ ha degraded evergreen forest
- Preprocessed and manipulated multimodal data from TIFFs, GeoJSONs, and GPX files using QGIS, Felt, and python to produce geospatial maps to enable labelling of forest degradation indicators
- Built YOLO and Detectron2-based models for semantic segmentation of orthomosaics to aid expert annotators
- Estimated drone parameters along with their errors for DJI Mini2 and DJI Air2S through self-devised field work experiments
- Applied single-image photogrammetry formulae to obtain morphometric measurements of Gangetic river dolphins which will be published in a research paper

Core Team Member | Coastal Impact

Jul 2023 - May 2024

- Worked as a conservation scuba diver, data scientist and writer with Coastal Impact
- Scuba dived at Grande Island to set up 50+ artificial reefs, transplant 800+ coral fragments, conduct 10+ marine surveys, and collect primary data for segmenting coral images over 50+ dives
- Trained multiple YOLO-based instance segmentation models to segment corals from our artificial reef images with the best mAP50 as 0.97 resulting in saving 100+ manhours of labelling
- Wrote code to automate multiple tasks for Coastal Impact, started their monthly newsletter on Substack, and built 3D models of underwater objects using Agisoft Metashape and Affinity

Solo Founder | FotoMaker

Jan 2023 – Jun 2023

- FotoMaker was a SaaS that allowed users to create market-ready product creatives using SOTA stable diffusion-based techniques.
- Working on this full-time, I worked with 15+ D2C clients, conducted 80+ interviews with potential users, built a fully functional web application from scratch, worked on frontend with ReactJS and backend with Python, set up serverless deployments of custom stable-diffusion models and so much more!

Data Scientist | Locus.sh

Dec 2021 – Dec 2022

- Worked on projects involving building of a forecasting system, thorough cleaning and modelling of unclean data, ranking systems, and creation of our data pipeline.
- Engaged in dealing with different stakeholders, clients, and writing product specs.

Visiting Scholar | Max Planck Institute for Software Systems

May 2021 – Oct 2021

• Worked under Dr.Krishna P. Gummadi on problems involving Reinforcement Learning, Dynamic Programming, and Fairness in Machine Learning.

Machine Learning Research Assistant | Indian Institute of Technology Delhi

Jul 2020 - Mar 2021

• Worked under Dr.Rijurekha Sen on problems involving Spatiotemporal Interpolation, Gaussian Processes, Differential Privacy and Graph Neural Networks.

SELECTED ACHIEVEMENTS

- Organised and hosted the inaugural Climate Party in Goa in May'24 with over 20+ selected attendees from founders to artists to investors working in the climate sector
- Have volunteered consistently with NGOs where I have taught beatboxing to underprivileged children, set up machine learning projects for elephant detection, and analysed marine stranding data
- Co-authored this NDSS 2022 paper on air pollution monitoring