Ishan Nangia

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EDUCATION

Sri Venkateswara College, Delhi University

Delhi, India

Bachelor of Science (Honors) in Statistics

2016 - 2020

CGPA

8.43/10

Delhi Public School, Sec-45

Haryana, India

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

2014 - 2015

Percentage

2014 - 2015 96%

SELECTED WORK EXPERIENCE

Computer Vision Consultant | Technology for Wildlife Foundation

Dec 2023 - Present

- Designed pipeline to collect primary data, merge drone and satellite data, and produce geospatial degradation maps for restoring a degraded evergreen forest.
- Used YOLO and Random Forest models for semantic segmentation of drone-based orthomosaics and satellite imagery.
- Designed and performed field work experiments to calibrate drone parameters and collect primary data.
- Used single-image photogrammetry to obtain morphometric measurements of wild animals.
- Combined multimodal data from TIFFs, GeoJSONs, and GPX files with QGIS, Felt, and python to produce geospatial maps.
- Wrote technical blogs to communicate our research and findings.

Core Team Volunteer | Coastal Impact

Jul 2023 – Present

- Scuba dived as a **conservation diver** at Grande Island to transplant corals, conduct marine surveys, and collect primary data for segmenting coral images.
- Set up labelling pipeline for creating datasets for coral detection.
- Used YOLO and other foundation segmentation models to segment corals from our artificial reef images.
- Learnt to ID fishes, work on AI-based color correction of underwater imagery, and built 3D models of artificial reefs using Agisoft Metashape and Affinity.
- Wrote code to automate multiple tasks for Coastal Impact, **organised their workspace** and data documentation with **Quire and Notion**, and **started their monthly newsletter on Substack**.

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 product from scratch, worked on frontend with ReactJS and backend with Python, set up serverless deployments of custom stable-diffusion models, etc.

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.

Research Papers

Privacy in Urban Sensing with Instrumented Fleets, Using Air Pollution Monitoring As A Usecase (NDSS 2022)

Selected Courses

Climate Change: Learning for Action | Terra.do

 $Jul\ 2023 - Oct\ 2023$

• A deep dive into the full climate change landscape with a 12-week climate education and solutions bootcamp.

AI and Data Science Courses | Udacity, Coursera, Udemy

2020 - 2023

• Completed multiple online courses in the field of AI and data science to ensure continuous learning in the topics of Deep Learning, Computer Vision, Statistical Machine Learning, etc.