

# Disha Das

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## PROFESSIONAL EXPERIENCE:

### Upwork Freelancer, India

10/2023 to Present

- Developed a Telegram bot for [Reddit post summarization](#) and QA using Python, MongoDB, Pinecone, Openai LLMs, Langchain, Telegram API, Docker
- Developed a [Job Search analyzer](#) app that scrapes job details from any job board using Streamlit, Playwright, Docker
- Developed a [demand forecasting pipeline](#) for extracting product data from E-commerce website to Azure SQL using Azure Functions, ADLS, Databricks, Pyspark, MLFlow, Azure Data Factory, PowerBI, Github Actions
- Worked on a [Telegram bot for extracting PnL data](#) using screen capture and broadcasting to multiple users

### Data Engineer, Altum Solutions (Remote)

04/2023 to 10/2023

- Developed Dashboards, Queries using WQL and maintained Boards on Azure DevOps and PowerBI
- Migrated data and dashboards from Azure DevOps to PowerBI using Azure-Devops API for developing CAPEX reports

**Tools:** Python, Azure CLI, Azure-Devops SDK, Azure DevOps, PowerBI Desktop

### Robotics Research Volunteer, Georgia Institute of Technology, Atlanta GA

05/2020 - 12/2020

- Contributed extensively to [GTDynamics](#) library using C++, CMake, Linux, PyBullet
- Designed and implemented [motion planning of Octopod](#) configuration using Factor Graphs
- Worked on Factor Graphs, GTSAM, Simultaneous State Estimation and Optimal Control

### Graduate Teaching Assistant, Georgia Institute of Technology, Atlanta GA

05/2020 - 12/2020

- CS6476: Computer Vision, Dr Devi Parikh
- CS4001: Computing & Society

### Business Technology Analyst, Deloitte Consulting India Pvt Ltd, India

11/2016 to 05/2018

- Worked on testing financial reports and input forms (for loading sales and costs data to database) using SAP Business Planning and Consolidation tool and MS Excel
- Prepared training material for the client to get them up to speed with the tool functionalities
- Highly appreciated for creation of over 500 SIT (System Integration Testing) and UAT (User Acceptance Testing) scripts
- Developed dashboards and visualizations of firm's data using IBM Cognos Analytics for financial reporting

**Tools:** SAP BPC 10.1, MS Excel Add-In (EPM), MS PowerPoint, IBM Cognos Analytics

## EDUCATION:

### Georgia Institute of Technology, M.S. in Computer Science (Computational Perception & Robotics)

08/2019 to 12/2020

- [Master's Project: Spider Robot Motion Planning Optimization using Factor Graphs](#)
- 3.64/4.00 Cumulative GPA

### Veer Surendra Sai Institute of Technology, India, B.Tech in Electronics & Telecommunication

07/2012 to 07/2016

- [Thesis: Enhancing Image Contrast- A Novel Approach Incorporating 2D Histogram Equalization](#)
- 8.13/10.00 Cumulative GPA

## RESEARCH PROJECTS:

### Ultra-fast Seam Carving for Real Time Object Detection and Removal ([Read more](#))

08/2019 to 12/2020

- IEEE International Conference on Computational Photography (ICCP)(2020) Poster
- Introduced hardware and algorithmic speedups to modify the Seam Carving algorithm so that it can be run to remove objects from videos in real time.

**Evaluation of 3D Object Detection for Cars by improving existing frameworks ([Read more](#)):** Compared and improved upon two 3D object detection DL frameworks, PointRCNN and Frustum ConvNet on the Kitti dataset for Cars

**Obstacle Avoidance for Kinematically Redundant Mobile Manipulators ([Read more](#)):** Implemented obstacle avoidance algorithms under different scenarios using GTSAM library for a 6-link mobile manipulator arm

**Comparing the performance of Generative Models for Vector Drawing generation ([Read more](#)):** Experimented with DCGAN, Sketch-pix2seq, VAE-CNN on vector drawing generation and compared performance with our own VAE based model

**Human Acceptance of Unpredictable Behaviors in Fully Driverless Ride-Hailing Services ([Read more](#)) :** Survey based project comparing the leniency shown to errors caused by human drivers vs AVs under different scenarios

## SKILLS:

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| <ul style="list-style-type: none"><li>Strong command of Python, C++ and MATLAB</li><li>Proficiency in PyTorch, OpenCV, ROS</li><li>CI pipelines- Github Actions, Docker</li><li>Visualization- PowerBI, Matplotlib, Streamlit</li></ul> | <ul style="list-style-type: none"><li>Data Engineering Pipelines- Azure Data Factory, Azure Functions, Databricks, Pyspark</li><li>Scraping Pipelines- Playwright, BS4</li><li>LLM Frameworks, Langchain, Openai API</li></ul> |
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