Satini Sankeerthana

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LinkedIn: https://www.linkedin.com/in/satinisankeerthana **GitHub:** https://github.com/sankeerthana14/Data-Science-and-Al.git

Upwork: https://www.upwork.com/freelancers/~01f89d0e60eecee9c5?mp_source=share

EDUCATION

Nanyang Technological University: BEng. Computer Science Hons (Distinction)

2019 - 2023

Specialization: Artificial Intelligence

WORK EXPERIENCE

Data Scientist April 2024 – Present

Freelancing - Upwork

- Currently working on Sales Prediction, Pricing and Product Allocation for a Data Analytics
 Consultancy using Data Analytics and ML, with the deliverables being business insights
 generated from data and an ML Model for predicting sales prediction.
- Collaborated effectively with stakeholders to understand and translate their requirements into efficient ML models and Jupyter Notebooks to solve the problem at hand.
- Transferable Skills: ML Modelling, Data Analytics, Project Management, Communication.

Research EngineerSingapore Management University (SMU)

Dec 2023 - Jan 2024

- Developed data-loading, processing and modelling pipelines for a vision-based throat cancer diagnosis system by engineering robust object detection models.
- Developed novel approaches for video classification to ensure robustness in processing large-scale, real-world medical image data.
- <u>Transferable Skills:</u> ML Modelling, Pipeline Development, Research Writing, Innovation, Initiative, Problem-Solving, Communication.

Machine Learning Engineer

Aug 2023 - Oct 2023

Carecam

- Collaborated closely with researchers to develop a vision-based Software as a Medical Device (SaaMD) product that aids clinicians in their diagnosis of the patient's gait.
- Successfully solved critical bottlenecks by integrating LIDAR data and optimizing the pipeline involving tasks like scaling, smoothing, normalization and data manipulation.
- Led the migration of training and deployment codes to AWS to build a cloud solution.
- <u>Transferable Skills:</u> Image Processing, Pipeline Development, Cloud Migration, Problem Solving, Innovation, Collaboration, Communication.

Computer Vision Intern

Aug 2022 – Nov 2022

<u>Asurion</u>

- Collaborated closely with engineers to develop an AI assisted Mobile Phone Insurance Product that detects cracks and damage intensity done to a phone using YOLOv5.
- Optimised the data-loading, processing and modelling pipeline, conceptualised an automated Continuous ML Feedback Loop as part of the CI/CD process using AWS Service and implemented 3D Object Detection Models using Point Clouds.
- <u>Transferable Skills:</u> Data Collection, Processing Pipeline, Modelling, Cloud Solutions Development, Research, Communication.

Data Scientist Intern May 2021 – Dec 2021

A*STAR – Institute for Infocomm and Research (I²R)

 Collaborated closely with scientists to develop a vision-based 2D object detection system for Autonomous Service Robots in Hospitals, through a Semi-Supervised Learning Approach.

- Led the training and optimization for object detection models to assess Semi-Supervised and Incremental Learning efficacy.
- Researched and Implemented incremental learning and semi-supervised learning approaches to mitigate catastrophic forgetting that were published in 2 International Conferences.
- <u>Transferable Skills:</u> Data Processing, Modelling & Optimization, Research Writing, Collaboration, Problem-Solving, Innovation.

Data Analytics Intern

July 2020 – Nov 2020

Learnseeker

- Designed and Developed Dashboards to extract insights from data using Looker Studio to aid tuition centres in providing a personalised learning experience for the students.
- <u>Transferable Skills:</u> Data Analytics, Dashboard Design and Development, Problem-Solving, Communication.

PUBLICATIONS

- International Conference on Social Robotics (ICSR) 2021
 - Pahwa, R. S., Chang, R., Jie, W., Satini, S., Viswanathan, C., Yiming, D., Jain, V., Pang, C. T., & Wah, W. K. (1970, January 1). A survey on object detection performance with different data distributions. SpringerLink. https://link.springer.com/chapter/10.1007/978-3-030-90525-5 48
- Conference on Learning Factories 2022
 - Chang, R., Pahwa, R. S., Wang, J., Chen, L., Satini, S., Wan, K. W., & Hsu, D. (2022, April 7).
 Creating semi-supervised learning-based Adaptable Object Detection Models for Autonomous Service Robot. SSRN.
 https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4075994

PROJECTS

Trivia Telegram Bot Using ChatGPT

Aug 2023 – Dec 2023

Nanyang Technological University

- An end-to-end group project where we developed a Telegram Bot by incorporating ChatGPT
 API that allows users to play Trivia. Was responsible for creating the telegram bot and
 integrating ChatGPT with the telegram bot.
- <u>Transferable Skills:</u> Usage of APIs, Communication, Problem-Solving, Innovation, Teamwork.
- Project Link: https://github.com/sankeerthana14/Trivia-Telebot-ChatGPT.git

TECHNICAL SKILLS AND CERTIFICATIONS

Programming Languages: Python | MATLAB

ML and Data Science: Tensorflow | PyTorch | Pandas | NumPy | OpenCV Seaborn | Matplotlib | Data Mining | Insight generation | Google Looker Studio | Tableau | Microsoft Power BI

AWS Services: SageMaker | Lambda | S3

Operating Systems: Linux

Certifications:

- 1. Machine Learning Stanford University Coursera
- 2. Python for Data Science and Machine Learning Udemy

CO-CURRICULAR ACTIVITIES, LEADERSHIP ROLES AND ACHIEVEMENTS

Vice-Chairperson 2020 – 2022

<u>Tiong Bahru Youth Network (A Grassroots Voluntary Organization)</u>

- Spearheaded Coding Competition and Workshops for secondary school students. This
 included coming up with content for the workshop as well as conceptualising and executing
 the theme and judging criteria.
- Actively volunteered in many food and recycling drives as well as voluntary events targeting the elderly and children.