

Santhana Mikhail Antony S

Chennai, Tamil Nadu | +919489165233

smantony007@gmail.com

Summary

Innovative Machine Learning Engineer with 1+ year of hands-on experience in developing traditional machine learning and generative AI products, including a Gen AI-based OCR extractor. Enjoys reading and contributing to open-source code. A dedicated learner and high-achieving college student with a CGPA of 9.27/10, proficient in python, neural networks, and advanced machine learning techniques. Passionate about leveraging AI to drive impactful solutions and committed to contributing to cutting-edge projects.

Education

Annamalai University | Chidambaram, Tamil Nadu

B.E., Artificial Intelligence and Machine Learning | 05/2023

- Graduated with a CGPA of 9.27
- Participated and conducted hackathons and workshops.
- Started a student focused group called Tech Club.
- Was part of Computer Science and Engineering Association (CSEA) committee members.

Experience

Stradegi Solutions | Tamil Nadu, Chennai

Technical Analyst | 06/2023 - Present

- **Gen AI OCR Extractor:** Finetuned a quantized Llm into a QLORA adapter using HuggingFace's Supervised Finetuning Trainer, achieving a 98% accuracy in OCR extraction.
- **Model Serving and Benchmarking:** Implemented state-of-the-art techniques for serving and benchmarking Large Language Models in production environments using cloud compute resources, ensuring robust performance and scalability.
- **Agentic Chatbot Development:** Created an agentic chatbot utilizing Retrieval-Augmented Generation (RAG). Developed an integrated Text-to-SQL model as part of the workflow and conducted comparative analysis of toolkits like LlamaIndex and LangChain to optimize development.

Stradegi Solutions | Tamil Nadu, Chennai

Machine Learning Intern | 01/2023 - 06/2023

- **Enhanced Data Extraction:** Designed and deployed advanced machine learning models to extract critical data from a variety of documents, significantly optimizing information retrieval processes and boosting productivity.
- **Image Processing Expertise:** Applied sophisticated image processing techniques for document preprocessing, including readability enhancement, noise reduction, and accuracy improvement in subsequent analyses.
- **High-Precision Classification:** Utilized Support Vector Machines (SVM) with hyperparameter tuning to classify and categorize documents based on content, achieving 99% accuracy during validation and ensuring efficient document retrieval.

TCS iON

Intern | 09/2021 - 10/2021

- Soft Skills and Professional Etiquette
- Accounting and IT Fundamentals
- AI Fundamentals

ICT learnathon

Intern | 08/2020 - 11/2020

- **Technology Proficiency:** Acquired in-depth knowledge of cutting-edge technologies such as Robotic Process Automation (RPA), Virtualization Tools like VMware, Cisco Packet Tracer, and the Internet of Things (IoT).

Annamalai Innovation and Incubation Research Foundation | Tamil Nadu, Cuddalore

Community Talent Head | 05/2020 - 08/2020

- **Team Management:** Directed and coordinated multiple teams in a not-for-profit organization, overseeing activities that supported the organization's mission.

- **Task Assignment and Reporting:** Efficiently assigned and clarified tasks to team members, and provided comprehensive reports on their progress and outcomes.
- **Tool Proficiency and Guidance:** Assisted team members in navigating and utilizing professional tools such as Asana and Outlook, enhancing their productivity and collaboration.
- **Professional Development:** Gained valuable experience working in a professional setting, honing skills in project management, communication, and team coordination.

Skills

Team Management, Project Management, Generative AI, Pytorch, HuggingFace, LangChain, LlamaIndex, Artificial Intelligence, DeepOps, Kubernetes, Application Development, Python, TensorFlow

Certificates

Scientific Computing with Python, Data Analytics with Python (nptel), Applied Accelerated Artificial Intelligence (nptel)

Research Papers

- Published a paper in IoTCloud'21 Symposium, conducted by IIIT Kottayam, under the title "**Novel Applications of Neuralink in Healthcare**"

Projects

- **Budget App:** Built a python project to keep track of budgets in various departments of a company.
- **Probability Calculator:** Built a program that can simulated experiments and calculate probability from the State space.
- **Discord chatbot:** Built a discord bot that can chat like a cartoon character.