

VIGNESHSAI ROSHAN ANDE

☎ 213-843-5206 ✉ ande.roshan@gmail.com 🔗 LinkedIn.com/VigneshAnde 🐙 Github.com/andevsr 📄 Kaggle.com/andevsr

Education

University of Southern California

Master of Science in Computer Science - Data Science

Jan. 2025 – Present

Los Angeles, CA

University of Massachusetts Amherst

Bachelor of Science in Computer Science and Mathematics (Double Major)

Dean's List

Sep. 2017 – May 2021

Amherst, MA

Technical Skills

Programming Languages: Python, Java, C/C++, JavaScript, R, SQL

Developer Tools: AWS, Git, Azure, PostgreSQL, MySQL, Tableau, Docker, Elasticsearch

Frameworks: Scikit-learn, Tensorflow, Pytorch, Django

Experience

Turing

Team Lead

May 2024 – Dec 2024, Bengaluru, KA

Nov 2024 - Dec 2024

- Led a team of data scientists in executing Reinforcement Learning from Human Feedback (RLHF) tasks, ensuring high-quality deliverables through thorough work reviews and regular progress meetings.

Data Scientist

May 2024 - Nov 2024

- Wrote efficient, high-quality Python code to validate the performance and efficiency of large language models (LLMs), ensuring optimal model functionality and reliability.
- Employed both Supervised Fine-Tuning and Reinforcement Learning with Human Feedback techniques to optimize LLM model performance for complex tasks like Code generation related to AI/ML and real-world applicability.
- Developed and analyzed adversarial conversations with AI models and collaborated on enhancing AI user experience and dialogue reliability.

Atlas Systems

Software Engineer

July 2021 – Jan 2024, New Jersey

AInfinity Product - Internal

July 2022 – Jan 2024

- Worked on the full SDLC of In-house product Ainfinty, leveraging expertise in **Django Framework, Angular, AWS, ReactJS** ensuring seamless development, smooth implementation, and timely deployment, resulting in the successful delivery of high-quality software enhancements
- Applied and managed Ansible and ELK Stack for streamlined configuration management and log analysis.
- Led CI/CD pipeline configuration and management using **Jenkins, automating software builds, tests, and deployments**
- Engaged in collaborative efforts with clients utilizing **Agile** and **Scrum** methodologies to decipher and address optimization requirements
- Implemented regression testing utilizing PyTest and Selenium, ensuring robustness in product performance and reliability across diverse software iterations.
- Applied extensive knowledge in integrating third-party APIs and Webhooks, ensuring seamless communication between systems.
- Managed and optimized both NoSQL (**Elasticsearch, DynamoDB**) and relational databases (**PostgreSQL**) for efficient data storage and retrieval.
- Configured and maintained Nginx web servers, **ensuring optimal performance and security.**
- Utilized AWS services, including Lambda, API Gateway, SQS, SNS, and S3, for scalable and reliable cloud-based solutions. Implemented a customized lifecycle rule within S3, enabling the automatic deletion of outdated objects based on predefined timeframes, achieving a **cost reduction of 10% to 15%**

- Implemented multi-threading, message queues, WebSockets, and schedulers to enhance application functionality, scalability and responsiveness.
- Administered and Worked in Linux environments(CentOS, Redhat, Ubuntu), demonstrating proficiency in troubleshooting and system administration tasks.
- Leveraged the use of containerization tools such as Docker for microservices enabling higher efficiency and scalability

Quill Project - Warburg(Client)

- Worked on back-end and front-end feature developments and enhancements using **ReactJS** and **.NET**
- Engaged in collaborative efforts with clients utilizing Agile and Scrum methodologies to understand and address requirements
- Enhanced client relations through proactive communication, attentive service, and tailored solutions, fostering stronger and more positive relationships.

PRIME Project - Internal

- Optimized and modernized the legacy ASP.NET codebase for the product, achieving a significant **20% reduction in load times through strategic refactoring and performance enhancements.**
- Contributed to the development of new public REST APIs to support the implementation of innovative features.

ML Engineer(Contract)

July 2021 – June 2022

- Designed and implemented a robust end-to-end machine learning pipeline tailored for processing gigabytes of system and application logs, encompassing seamless data collection, pre-processing for optimal model training, and evaluation, resulting in efficient anomaly detection
- Engaged in advanced preprocessing and noise reduction techniques, harnessing Word2vec and other methodologies to create word embeddings essential for model training and refinement
- Designed and trained Convolutional Neural Networks (CNNs), consistently achieving an impressive average **accuracy ranging between 80% to 85% through meticulous model design and fine-tuning**

Koyo Software Solutions

Dec 2020 – Jan 2021

Machine Learning Intern

Remote

- Engineered Optical Character Recognition (OCR) model specifically designed to extract text from images of invoices and receipts, leveraging machine learning methodologies
- Executed streamlined pre-processing techniques like thresholding and noise removal on extensive image sets, optimizing the JSON output storage for enhanced efficiency and accessibility.
- Produced extensive JSON datasets of handwritten and machine-generated text, laying the groundwork for future training endeavors.

Projects

OrchardWatch

Sep 2019 – Dec. 2019

Python, Tensorflow, AWS

Remote, MA

- Engineered a responsive website for Cold Spring Orchard, integrating AI-driven solutions with a network of IoT devices to monitor and analyze crucial environmental metrics such as temperature and soil conditions, contributing to research-focused initiatives.
- Built and trained a Machine learning model to predict if an image of an apple has a disease or not with great accuracy
- Hosted code on EC2 and generated prediction on the recent image in S3 and updated predictions and annotations in dynamoDB.