Sripaad Srinivasan

+447717227680 | sripaad751@gmail.com | Greater London, United Kingdom

Summary

Deep Learning Engineer with a passion for Natural Language Processing (NLP).

Proven track record of developing and deploying state-of-the-art NLP models, with a passion for using technology to solve real-world problems. 2x Kaggle Expert with 3+ years of experience in data processing, model training, and NLP. Portfolio includes successful projects in intent classification, keyword extraction, politeness transfer, and email generation. I'm always looking for new challenges and opportunities to collaborate with talented people. **Seeking new opportunities to apply skills and knowledge in the field of NLP and deep learning.** Excited to bring innovative approach to real-world problems and contribute to the growth of an ambitious team. **Connect with me to learn more about my work or discuss potential collaboration.**

LinkedIn: [Sripaad Srinivasan | LinkedIn](#) **Github:** [Sripaad Srinivasan | GitHub](#) **Website:** [Sripaad Srinivasan | Website](#)

Education

Royal Holloway University Of London | London
Msc Artificial Intelligence | 09/2024

- Recipient of Computer Science Scholarship.

Anna University | Chennai, Tamil Nadu
Bachelor of Engineering in Computer Science and Engineering | 11/2020

- Organising Head SaacHack'19 a 24hr National Level Hackation conducted in 2019.
- President Code Club(2019-20).
- PR Head SaacHack'18 a 24hr National Level Hackation conducted in 2018.
- Creative Editor of Lumos Magazine a English Literary Club Magazine published in 2017.
- Joint Secretary English Literary Club(2016-17).
- Certified in Oracle PL/SQL

Skills

Python, Docker, Algorithms, PyTorch, TensorFlow, SQL, C++, Language Modelling, Huggingface, Fast API, NLP, Deep Learning, Reinforcement Learning, Langchain, VectorDBs, AWS, Statistical Analysis, Neural Networks, GCP, Communication skills, REST, GIT, Software development

Experience

AI4Privacy | Remote(London,United Kingdom)
Open Source Researcher | 09/2023 - Present

- Developing advance techniques for training state-of-the-art Large Language models while preserving user privacy.
- Investigate and implement privacy mechanisms to ensure that LLMs do not leak sensitive information about individuals.
- Working on making LLMs more transparent and interpretable, researching into explainable AI (XAI) techniques.

Zoho Corporation | Chennai, Tamil Nadu
Deep Learning Engineer(NLP) | 03/2021 - 09/2023

Expertise in building, improving, and extending NLP capabilities.

- Utilized a wide range of NLP techniques, including word embeddings (**Word2Vec**, **FastText**) and sentence encoders (**Universal Sentence Encoders**, **Sentence Transformers**) to process and analyze text data.
- Employed Recurrent Neural Networks (**RNNs**) and Long Short-Term Memory Models (**LSTMs**) for text analysis.
- Leveraged deep learning frameworks such as **PyTorch** and **TensorFlow** for building and training neural networks.
- Proficiency in data manipulation using Python libraries like pandas and NumPy.
- Strong background in feature engineering, hyperparameter tuning, and model optimization to maximize accuracy.
- Skilled in data visualization using tools like Matplotlib and Seaborn for insightful data exploration.
- Extensive knowledge of sequence-to-sequence models, attention mechanisms, and transfer learning for NLP tasks.
- Familiarity with **spaCy** and advanced text preprocessing techniques, including sentence tokenization.

- Experience fine-tuning pre-trained language models such as BERT, RoBERTa, gpt2, including Causal Language Models for specific NLP tasks.
- Actively research and evaluate new approaches to NLP problems.
- Stay updated on recent NLP research papers and incorporate state-of-the-art techniques into projects.
- Proficient in taking projects from development to production by producing deliverable results.
- Implement model deployment pipelines using tools like **FastAPI** or **Streamlit** to serve ML models as RESTful APIs.
- Utilize the Zoho Cloud Platform(internal) for scalable and reliable model hosting.
- Mentor junior team members in building and deploying models efficiently.
- Train junior team members in existing workflows, GPU cluster usage, code review processes, and collaborative development practices.
- Share best practices for code optimization, model scalability (Knowledge distillation), and error handling in production environments.
- Organized a Hackathon for a team of 70+ individuals and actively participated in coding competitions on platforms like Kaggle to solve real-world data science challenges.

Qube Cinema Pvt Ltd. | Chennai, Tamil Nadu
Product Engineering Intern | 06/2019 - 09/2019

- Tasked to Create an Automated test System to run tests in multiple environments, for Qube Wire product.
- Containerized services within Qube Wire.

Circular Edge Solution Pvt Ltd. | Chennai, Tamil Nadu
Developer Intern | 12/2018 - 03/2019

- Researched on integrating Tibco's "Flogo" into services.
- Researched on Chatbots for JD Edwards ERP, Sales Division of the company.

Projects

All of the following projects were completed during my tenure as a **Deep Learning Engineer** at **Zoho Corporation.**

1. **Spanish Keyword Extraction**: Developed a model responsible for extracting keywords, important entities, or elements within text content. Initially developed a BiLSTM-CRF model then upgraded to an Electra-transformer model to significantly enhance keyword extraction accuracy. Improved search relevance and reduced manual tagging efforts, leading to more efficient content management.
2. **Intent Analysis**: Utilized a transformer model for intent analysis to discern the underlying intentions behind customer interactions within the CRM system. Addressed diverse customer interactions, each serving distinct purposes related to the organization's products or services, including feedback sharing, issue reporting, inquiries, requests, and product purchases. Spearheaded the development of the feature, which successfully identified customer intentions such as complaints, feedback, queries, requests, and purchase-related interactions. Approached leveraged a pre-trained DistilBERT Model, to enhance the accuracy and efficiency of intention detection. Improved customer service by gaining actionable insights into customer intentions and preferences. 100k active API calls every day.
3. **Custom Intent Model**: Developed a Natural Language Inference classification model to enhance the accuracy of intent classification. Improved the organization's ability to understand and respond to customer queries and requests effectively. Three other products use the API totaling to 250k active calls every day.
4. **Voice of Customer Analytics Tool**: Played a pivotal role in the development of a Voice of Customer tool, enabling the automated analysis of unstructured data to extract significant customer insights.Collected customer data from various communication channels, including calls, ticket management systems, surveys, and emails. Utilized state-of-the-art Natural Language Processing (NLP) models, encompassing sentiment analysis, intent analysis, keyword extraction, emotion analysis, and contextual summarization, to extract voice-related aspects from customer data. Achieved patent recognition for the innovative Voice of Customer tool, showcasing its uniqueness and value in improving customer understanding.
5. **Politeness Style Transfer (Generative AI)**: Spearheaded the development of a sophisticated sequence-to-sequence (seq2seq) model designed to transform impolite text into polite expressions. Innovatively integrated a comprehensive solution that includes not only text transformation but also a politeness classifier and a ranker model to evaluate the quality of generated outputs. This groundbreaking feature promotes respectful and effective communication, enhancing user experience and maintaining a positive online environment.
6. **Email Suite (Generative AI)**: Fine-tuned Large Language Models (LLMs) for email generation, aligning them with project requirements. Trained LLMs with custom instruction sets to enhance email generation capabilities using datasets curated from different sources. Continuously experimented and refined LLMs to better suit the email suite needs. The model has the capability of drafting, replying, and fetching additional data for emails, streamlining communication processes and improving efficiency.