# Shrinivas Patil

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https://github.com/Shridat

#### EDUCATION

### California State University

Master of Science in Computer Science

#### Shivaji University

Bachelor of Engineering in Computer Science

#### EXPERIENCE

#### Teaching Associate

California State University

- Implemented interactive teaching methods for data structures that include 10 practical assignments and 4 projects using C++.
- Developed 10 programming assignments for data structures that impacted 120 students to improve understanding of concepts like graphs, trees, stacks, and queues
- Explored ways to visualize GitHub collaboration in a classroom setting

#### Machine Learning Engineer

Script Build

- Designed and implemented scalable APIs and web services on large datasets, enhancing system efficiency by 30%
- Engineered an automated robust machine learning pipeline enabled faster model training and deployment by 35%
- Produced high-quality code and documentation for machine learning processes and architectures including integration with AWS SageMaker and databases such as MySQL and PostgreSQ

#### Projects

LeaseSum | Python, FastAPI, React, Firebase, Hugging Face LLM

- Developed a full-stack web application using FastAPI serving a REST API with React as the frontend
- Remodeled Pegasus transformer pipeline to achieve validation loss of 0.1145 that Summarizes lease in 2 paras
- Scaled a product from 1 to 8 features a akin to building robust AI training and inference infrastructure
- Improved user experience by 40% with an estimated security deposit, rent, and law recommendations

## RAG Powered Insurance QA Chatbot | Python, Lang-Chain, Streamlit, Git Oct. 2023 – Mar. 2024

- Built a QA chatbot for policy documents that improves information retrieval accuracy by 40%
- Reduced Response time by 50% for chatbot assistance.
- Used advanced NLP techniques to achieve a relevancy score increase of 0.2 and a faithfulness score increase of 0.1

## Professor Rating/Quality Prediction | Python, TensorFlow, LSTM

- Conducted sentiment analysis leveraging NLP and feature engineering, processing 10,000 web-scraped samples and encoding JSON arrays with advanced techniques
- Optimized neural network configurations, highlighting Bidirectional GRU with one-hot encoding for MAE: 0.78 using word2Vec
- Enhanced performance of the neural network by Glove embeddings, and character-level augmentation to 0.59

## Automated Pest and Disease Detection | Python, TensorFlow, AWS SageMaker June 2020 – Oct 2021

- Created a web application using Python, Flask, and JavaScript research project to impact 10000 farmers
- Cultivated deep learning model to distinguish pests and diseases on plant with 94% accuracy
- Collaborated with a national agricultural university, resulting in securing \$120k in funding from the Indian government for further research and development

## TECHNICAL SKILLS

Languages: Python, C/C++, SQL , JavaScript, HTML/CSS, R
Frameworks: React, Node.js, Flask, PyTorch, Keras, TensorFlow, LangChain, FastAPI
Developer Tools: Git, Docker, Google Cloud Platform, VS Code, Visual Studio, PyCharm, Power BI, Tableau
Libraries: Pandas, Numpy, Matplotlib, Scikit-Learn
Cloud Platform: AWS, Azure

Fullerton, CA Aug. 2022 – May 2024

India Aug. 2017 – May 2021

Aug. 2023 – May 2024

Fullerton, CA

June 2021 – July 2022

Jan. 2024 – May 2024

Mar. 2023 – May 2023

India