# Sai Shirini Prathigadapa J +1 716-275-9094 ✓ saishiri@buffalo.edu 🛅 Sai Shirini 🗘 SaiShirini3

## Summary

Highly analytical individual with strong apt for learning and collaborative skills. Looking forward to a challenging career in data science field in order to polish and utilize my knowledge and skills for personal growth and of organization

#### Education

University at Buffalo, The State University of New York

Expected December 2024

Master of Science in Data Science

3.83/4 (current)

Mahindra Ecole Centrale, Telangana

Bachelors of Technology in Electrical and Electronics Engineering

GPA: 8.35/10

Languages: Python, R, SQL, Scala (basics)

Machine Learning: Regression, Classification, Clustering, Feature selection, Decision tree, Random Forest

Deep Learning: Feed Forward Neural Networks, CNN, RNN, LSTM, GRU, Transformers, GAN Frameworks: Numpy, Pandas, Matplotlib, Scikit-learn, Tensorflow, PyTorch, NLTK, OpenCV

Data science: Data Preprocessing, Data Mining, Data Wrangling, Exploratory Data Analysis, NLP, CV Others: PowerBI, Matlab, RStudio, VSCode, Colab, Jupyter, MySQL, PostgreSQL, Hadoop, Spark

Soft Skills: Fast learner, Time management, Problem solving, Team player, Optimistic, Communication, Leadership

# Research Experience

University at Buffalo

Jan 2024

Buffalo, New York

Research Assistant

• Currently working on PyTorch-based neural network models for precise action spotting

Using advanced architectures and temporal modeling techniques to enhance model accuracy

IIT Palakkad May 2023 - July 2023 Research Aide Kerala

• Research work on Justifiable CNN and Grad-CAM

• Implemented J-CNN model for explainability in CNN, achieved precision 0.84 in a binary classification task

### **Projects**

VIDEO CLASSIFICATION ON UCF-101 | Python, DL, CNN, LSTM, Transformers, TensorFlow, OpenCV

- Built a deep learning model to predict action labels of videos from UCF-101 dataset
- Operated different key frame extraction methods

TWITTER SENTIMENT ANALYSIS | Python, TensorFlow, DL, LSTM, Natural Language Processing

- Conducted sentiment analysis on the Sentiment140 dataset using neural networks
- Achieved accuracy of 0.769 using Bidirectional LSTM

COVID-19 PREDICTION | Python, Machine Learning, Data preprocessing, Feature reduction and extraction, Scikit-learn

- Solving a regression problem by machine learning algorithms to predict rise in covid cases
- Used various regression models and achieved 88% accuracy

IMAGE PROCESSING | Matlab, Optimization

- Focused on learning optimized partial differential equation (PDE) models for image filtering
- Used training techniques to optimize parameters of a nonlinear diffusion model for image denoising

## Leadership and Volunteer Experience

Volunteer | IIT Palakkad

May 2023 - July 2023

• Volunteered at helpdesk for female freshers at IIT Pkd for JEE adv students

Placement Coordinator | IIT Palakkad

February 2023 – June 2023

• Led as Career Development Center Coordinator for M.Tech DS'22

Grader | IIT Palakkad

February 2023 - June 2023

• Worked as a grader, compiling and assessing of class assignments for a student cohort of 150s

#### Achievements

National Rank: Secured All India Rank 77 in GATE Mathematics'22 National Rank: Secured All India Rank 554 in JAM Mathematics'22

Scholarship: Received Rs.1 lakh as merit scholar ship from Mahindra Ecole Centrale in 2018