# **Pranav Raikote**

J 9448210677 ■ pranavraikote@gmail.com 🛅 linkedin.com/pranavraikote

github.com/pranavraikote

## Experience

Roadmetrics.ai Bengaluru, India

Machine Learning Engineer

August 2023 - Jul 2024

- Designed a novel system integrating a custom segmentation network to reduce false positives, enhancing accuracy with minimal processing
- Led training and maintenance efforts for over 5 essential Computer Vision models, optimizing AI pipelines to achieve up to 4x throughput on GPU-based cloud virtual machines (VMs)
- · Managed cloud infrastructure to ensure scalability and reliability, overseeing setup and operations of multiple GPU-based VMs and serverless functions

Plexflo Bengaluru, India

Al Researcher

February 2022 - April 2023

- Designed and developed AI algorithms for the Utility Industry, including an AI algorithm for identifying Electric Vehicle charging signatures from Smart Home meter data
- Engineered a Generative AI chatbot that improved data-driven decision-making processes for utilities, reducing time by 50%
- · Contributed to the open-source community by developing features for the plexflo library on GitHub, enhancing accessibility to AI tools
- Presented at international conferences including IEEE ISGT-Asia 2022 in Singapore and ISUW 2023 in Delhi, covering topics such as real-time cloud frameworks for EV charging signature detection and the utility of Generative AI technologies

**Applied Singularity** Bengaluru, India

R&D Engineer (AI)

September 2020 - January 2022

- Led all Al activities aimed at enhancing content management and delivery. Implemented an Al processing pipeline for content delivery, increasing throughput by 2.5x and reducing human labor by over 50%
- Designed a Recommender System that personalized content delivery using multiple contextual information nodes, significantly enhancing user experience
- · Started blogging and created tutorials to educate newcomers in NLP and Object Detection domains

#### Technical Skills

Languages: Python, SQL, HTML5/CSS3

Frameworks/Tools: TensorFlow, PyTorch, Keras, RASA, NLTK, FastAPI, Git, Docker, Kubernetes, AWS, GCP

### Education

# **BMS Institute of Technology & Management**

Bengaluru, India

B.E. Computer Science & Engineering

Aug 2016 - Aug 2020

## **Projects**

#### NILM Open Source Library (7)

June 2022 - August 2022

· Open-sourced a Python library for Non-Intrusive Load Monitoring (NILM) on smart home meter data, enabling the identification of Electric Vehicle (EV) charging signatures within 15-minute intervals

## **Recommender System**

September 2021 - January 2022

- Led a project on recommender systems for a mobile app content feed. Addressed challenges such as the cold start problem by integrating user click, like, and bookmark history
- Implemented algorithms to enhance content personalization and provide relevant recommendations based on user interactions

#### Early diagnosis of Pneumonia using Computer Vision techniques

December 2019 - August 2020

- Conducted extensive research on image processing, model building, and hyperparameter optimization techniques
- Applied best practices in data processing, resulting in an accuracy increase of more than 5%
- · Achieved a model accuracy of 92%, matching performance levels of other state-of-the-art models in the field

#### Image Caption Generator for soft labelling image data 🖓

January 2020 – April 2020

- Designed and developed an LSTM model for generating multiple-word captions from input images
- Conducted substantial R&D on Deep Learning systems, reducing architectural design time by 40%
- Developed a project capable of serving as a first-stage automated image dataset labeler, reducing dataset labeling tasks by more than 50%

#### Publications

Pranav Raikote, S. R. S. S. (2021). Sentiment Analysis of Kannada Political Tweets using Support Vector Machines. Design Engineering, 647-656. Retrieved from the designengineering.com