# Nagendra K P

## **Profile**

Aspiring AIML with a foundational understanding of Machine Learning, Deep Learning and Computer Vision. Eager to leverage my academic background and self-taught projects to contribute to innovative data-driven solutions in a professional environment. Passionate about continuous learning and applying theoretical knowledge to real-world challenges.

# **Professional Experience**

11/2024

#### Data Science Intern, Nasscom Foundation

Banglore, India

- Processing, cleansing and verifying the integrity of data used for analysis. Doing analysis and presenting results in a clear manner.
- Working on building and optimizing the state-of-the-art Machine learning and Deep Learning models.
- Working and learning on how to create and automate the project lifecycle with the help of creating data pipelines.

## **Projects**

## Phishing Detection ML Pipeline (link)

- End-to-End Machine Learning Pipeline for Phishing Website Detection using a modular, configurable, and production-ready approach.
- Models Trained: Random Forest, Decision Tree, Gradient Boosting, Logistic Regression, AdaBoost and Automated Hyperparameter Tuning
- Experiment Tracking: MLflow is integrated with DagsHub for metrics & artifact logging

#### Topic Modeling on News Articles (link)

- End-to-End Machine Learning Pipeline for Topic Modeling is an unsupervised NLP technique used to uncover hidden thematic structures in text data.
- Models Trained: Latent Dirichlet Allocation (LDA) and Latent Semantic Analysis (LSA).
- Measures the semantic similarity between high-scoring words in a topic.

#### Safety Helmet Detection Model Based on Improved YOLO-M (link)

- The "Safety Helmet Wearing Detection Model" utilizes an enhanced YOLO-M architecture for real-time detection of safety helmet compliance.
- The project involves assembling a dataset of images, preprocessing, and fine-tuning the YOLO-M model specifically for helmet detection. Post-training, the model performance will be evaluated using metrics like precision and recall.
- It will be deployed for static image and video analysis to improve safety in various environments.

# **Skills**

**Programming languages:** 

Python

Deep learning algorithms:

ANN, CNN, RNN

**Database** 

SQL, MongoDB

Gen AI

Langchain

**Machine learning algorithms:** 

Linear Regression, Logistic regression, Decision tree,

Random forest, XGBoost

**Frameworks** 

TensorFlow, Scikit Learn

**MLops** 

Docker, Git

**Education** 

2020- 2024 Bachelor of Engineering (CSE), VTU Bangalore, India

Cambridge Institute of Technology

**7.17** CGPA

2024-2026

Bangalore, India

Master of Technology (AIML),

M. S. Ramaiah University of Applied Sciences

**8.13** CGPA