Hemachandran K

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Profile

Recently graduated Master of Computer Applications (MCA) professional with a strong foundation in Python, Web Development, Machine Learning, AI, Automation, Testing, and Database Management. Equipped with excellent analytical and problem-solving skills, along with a passion for innovation and continuous learning. Eager to apply technical expertise and grow in a dynamic, collaborative environment.

Education

Master of Computer Applications

Vellore Institute of Technology (VIT) 08/2023 - 05/2025 | Vellore, India

Bachelor of Computer Applications

C. Abdul Hakeem College 08/2020 – 06/2023 | Ranipet, India

HSC

Ethiraj Matric Higher Secondary School 07/2019 - 03/2020 | Vellore, India

SSLC

Ethiraj Matric Higher Secondary School 06/2017 – 03/2018 | Vellore, India

Skills

Python | JavaScript | Java | SQL | MongoDB | Machine Learning | Deep Learning | Artificial Intelligence | GitHub | TensorFlow | Visual Basic | Automation | Manual Testing

Academic Achievements

Presented two research papers at a SET Conference at Vellore Institute of Technology 2024

Crop Yield Prediction and Facial Recognition Attendance System

7538800174

github.com/Hema25chan

Projects

Automated Bug Detection in Software Using Machine Learning

12/2024 - present

- Applied AGEO with OBL for selecting the top 50% most relevant features, reducing computational complexity by 40% and enhancing prediction accuracy.
- Utilized LSTM-based RNNs with a 3-layer architecture to analyze sequential bug patterns, achieving an F-measure of 85% and MCC of 0.78.

Fashion Image Retrieval System

07/2024 - 12/2024

- Deployed a responsive user interface using Streamlit, allowing real-time recommendations for over 1,000 users daily.
- Reduced processing time from 10 seconds to 7 seconds per image by optimizing data pipelines with NumPy and tqdm.

Rural E-Commerce Investment and Financing Model Based on Blockchain and Data Mining

04/2023 - 06/2023

- Blockchain-based e-commerce model using Java, MySQL (10,000+ transactions), and AES-256 encryption (99.9% security).
- Implemented product tracking and risk analysis, processing 5,000+ records, boosting efficiency by 40% and reducing risks by 35%.

Certificates

• Machine Learning with Python, CognitiveClass, IBM

Languages

Tamil | English | Telugu | Hindi