Shashaank V

SKILLS

Languages: Python, C/C++, Java, SQL, HTML/CSS

Tools and Frameworks: Git/GitHub, Linux, TensorFlow, Keras, Flask, Pandas, NumPy, PyTorch

EDUCATION

Vellore Institute of Technology (Chennai)

2025

B. Tech Computer Science Engineering

Current GPA: 8.71/10.0

SBOA School and Junior College (12th)

Percentage: 93.4

SBOA School and Junior College (10th)

2019

2021

CBSE

Percentage: 95.0

PROJECTS

CBSE

Machine Learning for Myocardial Infraction complication §

Team project for the IEEE Conference

- Analyzed the use of ridge regression as a feature selector and evaluated various ML algorithms for predicting myocardial infarction complications.
- Gained proficiency in ML algorithms and development tools like VS Code, PyCharm, and Flask.

ImageClef-Image Captioning

 $Team\ project\ for\ the\ ImageClef\ Image\ Captioning\ competition$

- Participated in the concept detection subchallenge, developing models using ResNet-50, DenseNet, MobileNetV2, placing 8th globally. Analyzed and classified medical images, generating captions based on the classification.
- Currently working to improve the model using the SWIM Transform.

Brain Tumor Detection using Deep Learning

- Developed a deep learning model using VGG-19, ResNet50 and CNN architectures, enhancing ResNet-50 with an attention layer for improved performance.
- Developed expertise in CNN architectures (VGG-19, ResNet-50) and activation layers in deep learning.

Credit Card Fraud Detection using Deep Learning and Homomorphic Encryption

- Utilized encrypted data to process deep learning and machine learning models, ensuring data privacy.
- Learned about Homomorphic Encryption (Microsoft SEAL) and various deep learning and machine learning models.

Reinforcement Learning in the Prisoner's Dilemma

- Applied reinforcement learning to develop adaptive agents, compared their performance with traditional strategies, and analyzed payoffs, cooperation rates, and stability.
- Gained expertise in game theory and reinforcement learning.

HACKATHONS

V Strykathon Hackathon - Surgical Tool Segmentation

- Developed a deep learning approach with U-Net for high-accuracy surgical tool segmentation.
- Enhanced surgical visualization and automation, advancing computer-assisted surgery.

Prasunethon Hackathon - EcoAgriSpectra AI

- Created EcoAgriSpectra AI, a website integrating AIs for crop disease detection, soil health monitoring, pest detection, and crop yield prediction.
- Designed solutions to improve agricultural productivity and sustainability by providing real-time, AI-driven insights and recommendations.

CERTIFICATES

Deep Learning Certification (NPTEL)

Artificial Intelligence and Machine Learning Certification (SmartInternz)

Wildlife Ecology Certification (NPTEL)