Vivek Tiwari

About

- AI/ML Engineer proficient in Python, Deep Learning, and Natural Language Processing, with expertise in deploying intelligent web applications using Flask.
- My work, including published research in OCR and NLP (LikhAI), reflects a commitment to building robust, real-world AI solutions.

Skills

Languages: Python, Java, C++, C, R, SQL

Python Libraries & Frameworks: Scikit-learn, Pandas, NumPy, Seaborn, Transformers, TensorFlow, Keras, PyTorch, Flask

Machine Learning & AI: Supervised learning, Unsupervised learning, Deep learning, Neural Networks, Natural Language Processing, Prompt Engineering,

Data Tools & Platforms: PowerBI, Git, GitHub, Kaggle, Firebase, SQLite, Jupyter

Web/App Technologies: HTML5, CSS3, Bootstrap, Flutter framework

Competitive Programming: HackerRank (5 star Python), GeeksforGeeks (Coding Score 300+), Codechef (ratings 1100+)

Education

Institute of Advanced Research, Gandhinagar

Aug 2021 - June 2025

B. Tech in Computer Engineering

- o CGPA: 9.14/10
- Coursework: Python Programming, Machine Learning, Natural Language Processing, Artificial Neural Networks, Artificial Intelligence, Algebra, Probability, Statistical modelling

Experience

Python Developer

Feb 2024 - Mar 2024

UniConverge Technologies

- $\circ\,$ Developed a URL shortener using Python and the lightweight Flask framework.
- o Applied Git and GitHub for version control, managing codebase integrity.

Publications

LikhAI: Handwritten Text Recognition and Processing Application

Jun 2025

Vivek Tiwari, Ram Navlani, Maitri Patel

10.56975/ijedr.v13i2.301403 **☑**

Projects

LikhAI: Handwritten Text Recognition & Processing Application

Link to repo

- Developed a web-based OCR and NLP tool utilizing Transformers and Flask to convert handwritten text to digital and perform summarization, paraphrasing, and translation.
- o Tools Used: Python, Flask, Transformers, HTML5, CSS3

Product Health Rater

Link to repo

- Built a Flask-based web application featuring a machine learning model to rate consumable products and provide health consumption advice.
- o Tools Used: Python, Machine Learning, Flask, HTML5, CSS3

Aquaminder Mobile Application

Link to repo

- Developed a Flutter-based IoT application that detects pipe leakage and facilitates plumber bookings, integrated with Firebase.
- o Tools Used: Flutter, Firebase

URL Shortener Link to repo

Link to repo

- o Designed a web-based URL shortening tool with Flask and Python, storing mappings in an SQLite database.
- o Tools Used: Python, Flask, SQLite, HTML5, CSS3

Personal Portfolio Website

Visit site

- Designed and developed a responsive personal portfolio website using HTML, CSS, and JavaScript to showcase skills and projects.
- o Tools Used: HTML5, CSS3, Bootstrap

Achievements

- 1. Received 1st Prize in Annual Research & Innovation Conclave, 2024 held at IAR, Gandhinagar.
- 2. Awarded Academic Excellence Award for the highest CGPA during the academic year 2023-2024.
- 3. Recognized as "Student of The Year" for the academic year 2022-2023.

Certifications

- 1. Hackerrank Python certification *Link* 🗹
- 2. Kaggle Learn: Python certification Link 🗹
- 3. SAP Machine Learning certification *Link* 🗹
- 4. GeeksforGeeks Python certification *Link* 🗹
- 5. Scaler Java certification *Link* 🗹