

VAIDIK VADHAVANA

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Education

University of Southern California
Master of Science, Computer Science

Aug 2024 - May 2026

University of Mumbai (APSIT)
Bachelor of Engineering, Computer Engineering

Dec 2020 - Apr 2024
GPA – **9.28/10.0**

Work Experience

EduSkills Foundation (AICTE)

Jul 2022 - Sep 2022

Software Engineering Intern

- Leveraged advanced machine learning algorithms and executed them on **Amazon Web Services (AWS)** using EC2 and S3 to analyze current trends of data.
- Trained a sophisticated deep learning model for the product pipeline, enhancing prediction accuracy by 15% through the optimization of ML models using hyperparameter tuning.
- Performed extensive **data cleaning** and **preprocessing** on large datasets using Python libraries (Pandas, NumPy), improving model performance by 20% through feature engineering and handling missing values.

APSIT Skills

Sep 2021 - Nov 2021

SDE Trainee

- Produced detailed **user guides** and **training materials** on machine learning basics, improving comprehension among over 30 students during workshops.
- Developed foundational skills in machine learning and AI/ML by creating impactful projects, applying object-oriented design principles and algorithms.
- Implemented machine learning algorithms to **automate** data analysis processes, decreasing manual workload by 50%.

Projects

APSIT Community | Flask, React, MongoDB, AWS

Jun 2023 - Mar 2024

- Led the development of a social media platform to encourage **inter-department communication** between students.
- Boosted platform security by executing **JWT authentication**, reducing unauthorized access by 30% and ensuring secure user authentication for 100+ users across the application.
- Collaborated with 120 students to test application, gather feedback, and implement necessary improvements, resulting in an increase in user satisfaction by iterating on improvements.
- Orchestrated **AWS deployment** using **Amplify**, **Elastic Beanstalk**, and **S3**, achieving a 40% improvement in application scalability and reducing deployment time.

NutriLytk for Diabetic Patients | Python, ML, Flutter

Jun 2022 - Mar 2023

- Constructed a mobile application designed to scan food labels and provide nutritional insights, enabling diabetic patients to effectively **monitor their diets** and maintain health safety.
- Engineered **APIs for personalized meal plans** based on a survey of 170+ diabetic patients, leading to improved dietary tracking and suggestions.
- Created **OCR scanner** for real-time nutritional label analysis, increasing user satisfaction by 30% through faster and more accurate meal logging.

Hire Me - Resume sorter | Python (pdfminer, nltk, spacy, tkinter)

Jan 2022 - Mar 2022

- Engineered resume sorting application using Python, which **improved resume processing** efficiency by 50% through the implementation of NLP techniques to categorize and sort resumes based on domain-specific keywords.
- Developed a **user-friendly GUI** using tkinter, resulting in a 30% increase in user engagement by making the application more accessible and intuitive for non-technical users.

Skills

Languages: Python, Java, JavaScript, Solidity, C, C++

Frameworks & Web Technologies: HTML5, CSS3, Node.js, Flask, Django, PyTorch, TensorFlow

Databases: PostgreSQL, MySQL, SQLServer, MongoDB

Cloud and Tools: AWS, GCP, Heroku, Git, Github, Postman, Cloud architecture