

Yashvikumari Bhagat

Yashvib1631@gmail.com | [Linkedin](#) | [GitHub](#) | +1 (945-286-6480) | Dallas ,Tx-75234

PROFILE

Currently pursuing a Master's in Computer Science with a strong interest in a Machine Learning Engineer internship. Motivated and detail-oriented, with hands-on experience in supervised and unsupervised learning, model evaluation, and data preprocessing.

RESEARCH WORK

Thesis – Application of AI for Designing High Entropy Alloys (Aug 2025 – Present)

Developing Sophisticated data curation techniques and applying AI tools to create high entropy alloys based on user specification.

Directed studies – Deep Learning with CNN (Jan 2025 – May 2025)

Built and analyzed VGG-16 and a custom 5-layer CNN on the CelebA dataset for gender classification and feature-map analysis. Implemented Layer-wise Relevance Propagation (LRP) for model interpretability, re-expressed 2-D convolutions as matrix multiplications, and applied Kolmogorov–Smirnov tests to identify and prune redundant feature maps.

EDUCATION

Masters in Computer Science, University of North Texas, USA. (GPA: 3.6/4)

Aug 2024 – Present

Bachelor of Computer Science, Gujarat Technological University, India. (CGPA: 8.83/10)

July 2019 – May 2022

SKILLS

Programming Language: Python, Java, C, C++, React, SQL, HTML, CSS, JavaScript

Frameworks: TensorFlow, Keras, Scikit-learn, NumPy, Pandas, Matplotlib, PyTorch, OpenCV

Concepts: Object-oriented programming, Data Structure, Algorithms

Technical Skills: GitHub, AWS (web service), Tableau, PowerBI, Microsoft Copilot, Open AI

Soft Skills: Problem-solving, Critical Thinking, Team-Work, Leadership

PROJECTS

Titanic Survival Prediction:

- Built a **machine-learning pipeline** on Kaggle's Titanic: Machine Learning from Disaster dataset to predict passenger survival. Performed data cleaning, feature engineering, and hyper-parameter tuning with Random Forest, Logistic Regression, and Decision Tree models, **achieving 82 %** accuracy with **Random Forest**.

Linear Methods for Classification:

- Explored linear classifiers (**Perceptron**, **Logistic Regression**) on the Glass dataset. Addressing class overlap through data preprocessing techniques, including normalization and **RBF Kernel** transformation. Implemented repeated **cross-validation (10-fold)** to assess model performance, **achieving 90%** accuracy.

Personal Website (React):

- Crafted with React, my personal website seamlessly blends creativity and functionality to showcase my professional journey through an interactive and visually engaging resume.

Mood Tracking App (React, Python (Framework-Djngo)):

- Developed a **full-stack web-application** where users log daily moods (happy, sad, nervous, etc.), maintain streak and access analytics with music recommendations, meditation timer, journaling, therapist booking and real time messaging system.

Weather Application (python):

- I designed and implemented a versatile Weather Application using the **Python tkinter library**. Providing users with real-time weather information for different locations. This application seamlessly integrates multiple functionalities, including displaying the current time, temperature, humidity, and weather conditions.