## KHUSHI PRASHANT MEHTA

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### **EDUCATION**

## **University of Southern California**

## **Master of Science in Computer Science**

Los Angeles, CA January 2025-Present

Relevant Coursework: Analysis of Algorithms, Foundations of AI, Web Technologies

Indus University

# **B.Tech in Information Technology**

Ahmedabad, India July 2019-April 2023

Relevant Coursework: Artificial, Web Development, Data Science, Machine Learning, Cyber Security

### **TECHNICAL SKILLS**

- Programming Languages: Python, SQL, C++, JavaScript, HTML/CSS
- ML Libraries: Scikit-learn, PyTorch, LLMs, Keras, TensorFlow, LangChain, Hugging Face Transformers, Deep Neural Networks
- Model Deployment & Tools: FastAPI, Flask, Streamlit, Gradio, Docker, Google Collab, Jupyter, Django, MLflow
- Soft Skills: Problem Solving, Critical Thinking, Leadership, Teamwork, Communication, Time Management, Adaptability
- UI/UX Design: Figma, Adobe XD, User-centric design, wireframing, prototyping, User flows, usability testing

#### PROFESSIONAL EXPERIENCE

### **USC Marshall School of Business**

Los Angeles, CA

June 2025-Present

- Assisted in teaching the course "Analytics: The Power of Data for Businesses" for a cohort of 40+ students.
- Guided students through 5+ data analysis projects using Machine Learning, Data Science, and Artificial Intelligence.
- Led 6 technical review sessions and graded 50+ assignments to support learning outcomes.

# Hashtechy User Experience Designer

**Teaching Assistant** 

Ahmedabad, India

September 2023-December 2024

- Designed UI/UX for 5+ platforms across cryptocurrency, e-commerce, and social apps.
- Led Currently app design; achieved 100k+ installs and 100% 30-day retention.
- Conducted A/B testing and usability research with 100+ users.
- Collaborated with 10+ developers to implement 15+ responsive UI components.

## **Space Application Center (ISRO)**

# Ahmedabad, India January 2023-July 2023

# Artificial Intelligence/Machine Learning Research intern

Trained & Built AI models: U-Net to enhance glacier classification accuracy by 20%.

- Processed 1,000+ Sentinel-2 satellite images using spectral and atmospheric preprocessing.
- Applied Random Forest and K-means clustering for comparative analysis.
- Presented findings in 2+ formal technical reports to senior scientific committees.

## **PROJECTS**

# Loan Approval Prediction (Python, Streamlit, Hugging face)

- Achieved 81% accuracy using logistic regression on a dataset of 600+ loan applications to predict approval status based on applicant income, credit score, and loan history.
- An interactive front-end that delivers instant feedback with prediction + explanation, reducing user decision time by ~40%.
- Integrated OpenAI's LLM API to generate 100% human-readable explanations of predictions, improving model transparency for non-technical users.

## Al Powered Travel Planning Assistant (React, Tailwind, Flask)

- Engineered a travel planner web app using LLMs (Mixtral via OpenRouter) for personalized itineraries.
- Designed React + Tailwind frontend with customizable destination, date, and budget fields
- Developed Flask backend to process natural language inputs and return itinerary plans.
- Integrated multi-turn memory to handle follow-up queries like ``Add scuba diving on Day 3.'
- Demonstrated a full-stack Generative AI solution optimized for real user needs.

# Glacier Classification with Satellite Imagery (PyTorch, ML)

- Built U-Net segmentation model to improve pixel-level detection by 30%
- Applied atmospheric correction, cloud masking, and preprocessing techniques.
- Benchmarked unsupervised (K-means) vs. supervised models for comparative performance.

# Sentiment Analysis on IMDB Reviews (Python, Keras)

- Created sentiment classifier using LSTM + GloVe on 2000+ reviews with 92% accuracy.
- Reduced overfitting via dropout and early stopping strategies.
- Visualized training progression with accuracy/loss curves and confusion matrix.

# **COURSES AND CERTIFICATIONS**

- Machine Learning A-Z: Hands-On Python In Data Science" course, Udemy
- IBM Generative AI Engineering Professional Certificate, Coursera