

# HARSHITA POOJARY

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## EDUCATION

### University of Southern California, Los Angeles, CA.

Aug 2023 - May 2025

Master of Science - Computer Science (Artificial Intelligence)

GPA: 3.85/4.00

Coursework: Analysis of Algorithms, Deep Learning, Artificial Intelligence, Machine Learning

### University of Mumbai, Mumbai, India.

Jul 2015 - May 2019

Bachelor of Engineering - Computer Engineering

GPA: 3.83/4.00

Coursework: Soft Computing, Distributed Databases, Web Technologies

## TECHNICAL SKILLS

**Core Programming Languages:** C, Python

**Other Programming Languages:** NodeJS, JavaScript, AngularJS, HTML/CSS, Java, C++

**Databases:** MongoDB, Redis, MySQL, Elasticsearch, Milvus

**Frameworks & Tools:** Docker, Kubernetes, PyTorch, Keras, TensorFlow, OpenCV, AWS, Azure, GIT, Jira, Postman, Swagger, Jenkins

## WORK EXPERIENCE

### Deep Learning Researcher

Jan 2024 - Present

#### Integrated Media Systems Center, Los Angeles, California.

- Analyzing and implementing models using Deep learning and OpenCV to track and count homeless encampments in the city of Los Angeles for urban planning by local government bodies.

### AI/ML Engineer

Jan 2022 - Jul 2023

#### Reliance Jio, India.

- Optimized **face detection Retinaface** model with model compression using **TensorRT** to reduce inference time by **40%**.
- Automated CI/CD pipeline for multiple projects including Video Motion Detection, Face registration, and Recognition.
- Implemented **mobile-based spoof detection** to prevent false facial verification using a photo or video with an accuracy of **90%**.
- Mentored **12** developers in implementing AI solutions to identify Grooming Scores and Punctuality Scores for individuals.

### Software Developer (Backend)

Jun 2019 - Dec 2021

#### Reliance Jio, India.

- Collaborated with 3 teams to integrate 250+ Newspapers, 150+ Live News channels, 800+ Magazines, and News in 13 languages across multiple media applications, increasing the user base by **50%**.
- Enhanced performance of APIs by **20%** with the integration of performance management, memory optimization, and alert management systems using **Kibana**, **Prometheus**, and **Grafana**.
- Increased user engagement by **30%** by customizing content as per user preferences, content history, and locality, delivering local news, user recommendations, and genre-based content.

## PROJECTS

### Distinguish AI generated and Real Human Faces (PyTorch, Stable Diffusion, Python)

Aug - Dec 2023

- Analyzed existing models for Generating human faces including GLIDE, DALL-E 2, and Stable Diffusion.
- Implemented CNN networks and Transformers to classify images into real and fake with **80%** accuracy.

### Analyzing AI Images for Object Detection and Classification (DALL-E-2, PyTorch, Keras)

Sep - Dec 2023

- Analyzed existing domains that lack training datasets to generate AI-synthesized images for learning.
- Improved the detection of survivors in post-earthquake scenarios by **5%** using AI-generated images with **DALL-E-2**.

### Sentiment Analysis (Python, PyTorch, AWS)

Jan - Apr 2020

- Implemented Sentiment Analysis on movie reviews from **IMDb** dataset using XGBoost.
- Utilized **Amazon Sagemaker** to create EC2 instance and deploy an API for the model.

## LEADERSHIP EXPERIENCE

### Mentor, Women in Engineering

Jul 2021 - Feb 2023

- Collaborated with a group of **58** School Alumni in Career Guidance and Counseling for **150** college students.
- Organized workshops and webinars on Web Development, and Machine Learning for **200** students.

### Event Head, Computer Society of India

Mar 2022 - Apr 2022

- Generated revenue (around **9000 INR**), organized and administered events “**Web Daemon**” and “**Code Swap**” in the annual fest **TECHMATE** at **RAIT**.
- Conceptualized and designed editorial sections for the annual newsletter and technical magazine **COZINE**.

## ACHIEVEMENTS & CERTIFICATIONS

- Completed Courses:** Computer Vision (Dec 2020), Artificial Intelligence (Sep 2020), Deep Learning (Apr 2020), Machine Learning (Sep 2018)
- Ongoing Courses:** GAN, MLOps, Building Real-Time Video AI Applications
- Received Award of academic excellence for securing Top 3 position in the Sophomore year.