# Harshita Poojary (HP)

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## EDUCATION

**University of Southern California,** Los Angeles, CA
Masters in Computer Science (Artificial Intelligence) **GPA: 3.7/4.0** **Aug 2023 - May 2025**

**Ramrao Adik Institute of Technology,** University of Mumbai
Bachelor of Engineering in Computer Engineering **GPA: 9.35/10** **June 2015 - May 2019**

## SKILLS

**Core Programming Languages**: C, Python
**Other Programming Languages:** NodeJS, JavaScript, AngularJS, HTML/CSS.
**Databases**: MongoDB, Redis, MySQL, ElasticSearch, Milvus.
**Frameworks**: Docker, Kubernetes, PyTorch, Keras

## WORK EXPERIENCE

**AI/ML Engineer**, *Reliance Jio* **Jan '22 - July '23**

- Optimized face registration 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 ***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.

**Product Engineer (Backend)**, *Reliance Jio* **July 2019 - Dec 2021**

- 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%***.
- 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.

## ACADEMIC PROJECTS

**Distinguish AI generated and Real Human Faces**, *Viterbi School of Engineering* **Jan 2024**

- Analyzed existing models for Generating human faces including GLIDE, DALLE 2, and Stable Diffusion.
- Currently implementing CNN networks and Transformers to classify images into real and fake.

**Utilizing AI-Generated Images for Object Detection and Classification**, *Viterbi School of Engineering* **Jan 2024**

- Analyzed existing domains that lack training datasets to generate AI-synthesized images for learning.
- Currently researching the performance of detecting survivors in post-earthquake scenarios using AI-generated images.

**Malaria Detection**, *Department of Computer Engineering*, RAIT **Aug 2022**

- Developed models using CNN, KNN, and Vision Transformers to detect malaria parasites in blood smear images. Trained on a dataset of ***27,558*** images.
- Evaluated various models and achieved an accuracy of ***97%*** using Vision Transformer.

**Dementia Detection from MRI Data** **Mar 2022**

- Designed a model using SVM and Random Forests to detect Dementia from MRI details. Trained on an Open Access Series of Imaging Studies (OASIS) dataset comprising ***373*** data points and ***15*** features.
- Attained an accuracy of ***96%*** using Random Forest.

## PAPER PUBLICATIONS & PRESENTATIONS

- "Comparative Analysis of Deep Learning Techniques for Malaria Detection", IEEE (2022).
- "System and Method for Early Detection and Post Disease Detection of Dementia Patients", IEEE (2022).
- "Classification of Garbage For Robotic Systems Using Deep Learning Techniques", IEEE (2022).
- "Innovative Teaching and Learning Interface with Evaluation Tool", IJIRCCE (2019).

## LEADERSHIP EXPERIENCE

**Event Head,** *Computer Society of India* **July 2015 - Feb 2019**

- 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.

**Mentor,** *Women in Engineering* **July 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.

## ACHIEVEMENTS & CERTIFICATIONS

- Completed Nanodegree in Computer Vision (Dec 2020), Artificial Intelligence (Sep 2020), Deep Learning (Apr 2020), and Machine Learning (Sep 2018) from Udacity.
- Currently pursuing a specialization in GAN and MLOps Courses from Coursera.