# Tushar Jagatap

Rayer, Maharashtra

## Education

## VIT Bhopal University

2022 - 2027 (Expected) Integrated M. Tech in Artificial Intelligence

CGPA: 8.41 Mar 2022

SVKM M.J. College, Jalgaon

Higher Secondary Certificate (12th), Maharashtra State Board Percentage: 77.17%

SVVM. Raver Mar 2020

Secondary School Certificate (10th), Maharashtra State Board Percentage: 93.80%

Skills

Programming Languages: Python, Java

Machine Learning & Deep Learning: TensorFlow, PyTorch, Keras, Scikit-learn, OpenCV, Fuzzy Logic

Data Analysis & Visualization: Pandas, NumPy, Matplotlib, Seaborn

Soft Skills: Problem Solving, Communication, Teamwork, Time Management, Adaptability

**Projects** 

## Tool for PTSD Detection using Micro-expression Recognition Model

May 2024

Python, Machine Learning, Computer Vision, VGG19

- Developed a machine learning model to detect PTSD by analyzing micro-expressions using datasets like CASME2, CASME3, and SAMM.
- Applied VGG19 architecture for feature extraction and classification of micro-expressions.
- Enhanced early PTSD detection through model training, evaluation, and optimization for high accuracy.

## Stress Monitoring System using Physiological Signals

Apr 2025

Python, TensorFlow, KNN, SVM, Decision Trees, Fuzzy Logic

- Designed a stress monitoring system analyzing physiological data like heart rate and skin temperature.
- Implemented machine learning algorithms (KNN, SVM, Decision Trees) and fuzzy logic for stress level classification.
- Achieved accurate stress prediction through data preprocessing, training, and model optimization.

## Bidirectional Sign Language Translator

May 2025

Python, Deep Learning, Computer Vision, OpenCV

- Developed a system to translate sign language gestures to text and speech, and vice versa using deep learning.
- Implemented CNN-based hand gesture recognition for real-time sign-to-text translation.
- Enhanced accessibility for hearing-impaired users with an intuitive interface and accurate recognition.

#### Extracurricular

#### Media Team Lead March 2024 - Present

Marathi Club

Insight Club

VIT Bhopal University

Lead media content creation and promoted club activities to increase engagement and visibility.

## Resource Department Lead

September 2024 – Present VIT Bhopal University

• Lead the Resource Department, coordinating with members for collecting news reports and photos for the newsletter.

• From September 2023 to September 2024, worked as a member and photographer of the Resource Department, capturing photographs and writing reports for the newsletter to document club events and activities

### Design Team Coordinator

July 2023 - February 2024

E-Cell Club

VIT Bhopal University

• Coordinated design efforts to create promotional materials for club events and activities.

#### Additional Information

Languages: English, Hindi, Marathi

Hobbies: Photography, Reading, Exploring New Places, Music