Tejas's Information

Name: TEJAS GAIKWAD
Email: tejasgaikwad16092002@gmail.com
Current residence: Buffalo, NY, USA
LinkedIn: https://www.linkedin.com/in/tejasgg
Github: https://github.com/Tejas160920
Portfolio Website: https://tejasgaikwad.vercel.app
Resume link:
https://drive.google.com/file/d/1chivCK9jpNtDkF8qTZy0Fy-rGHDHOyjS/view?usp=sharing
All projects link: https://tejasgaikwad.vercel.app/#portfolio

Professional Summary
A graduate student at SUNY Buffalo with expertise in full-stack development and artificial intelligence applications, currently pursuing an MS in Computer Science at the State University of New York at Buffalo. Skilled in React, Node.js, Python, and cloud technologies, with hands-on experience in building scalable applications, AI-based solutions, and real-time detection systems. Successfully completed research internships at SmartLeaven Digital Systems Pvt Ltd and Bhabha Atomic Research Centre (BARC).

Education

Undergraduate Degree

Institution: Vishwakarma Institute of Technology, Pune, India
Degree: Bachelor of Technology in Electronics and Telecommunication Engineering
Start Date: July 2020
End Date: August 2024
GPA: 3.2/4.0
Classes: Data Structures, Algorithms, Database Management Systems, Operating Systems, Computer Networks, Web Development, Machine Learning

Graduate Degree

Institution: State University of New York at Buffalo
Degree: Master of Science in Computer Science
Start Date: Fall 2024
End Date: Present
Classes: Cloud Computing, Software Design, Software Security, Data Visualization, Human-Computer Interaction

Additional Degree

Institution: Indian Institute of Technology (IIT), Madras
Degree: Bachelor of Science in Programming and Data Science
Start Date: August 2020
End Date: September 2021

Work Experience

Job 1

Company: SmartLeaven Digital Systems Pvt Ltd
Role: Software Developer Intern
Start Date: July 2023
End Date: June 2024
Responsibilities:
- Developed real-time detection systems using YOLO (v7, v8) for object detection and OpenCV for lane detection.
-Created a 7GB+ dataset to enhance AI models for autonomous driving applications.
-Optimized Jetson Orin processing, increasing real-time inference speed by 30%.
-Built a voice cloning application using RVC with an 80% accuracy in replication.

Job 2

Company: Bhabha Atomic Research Centre (BARC), India
Role: Research Intern
Start Date: June 2023
End Date: August 2023
Responsibilities:

- Implemented machine learning models that improved industrial efficiency by automating key decision-making processes.
- Developed a data simulator for Nuclear Power Plants (NPPs) and built a feedforward neural network for predictive analysis.

Projects - listed by most favourite to least favourite

Project 1

Title: Agribot
Tagline: AI-powered crop weed and disease detection system. A precision farming robot for weed detection, depth estimation, and autonomous navigation.
Year: 2024
Technologies: OpenCV, Python, YOLOv7, Stereo Vision
GitHub: https://github.com/Tejas160920/Agribot
Category: AI/Computer Vision

Project 2

Title: Virtual Clothes Try-on
Tagline: A Chrome extension for online apparel visualization using GenAI & IDM-VTON.This Chrome extension lets you try on clothes virtually while shopping online, providing a fun and interactive way to see how outfits look on you.
Year: 2024
Technologies: Node.js, Express.js, HTML, CSS, JavaScript
GitHub: https://github.com/Tejas160920/Virtual-Try-On
Demo: https://chromewebstore.google.com/detail/virtual-clothes-try-on/hpogkihhfoglihcgmhfhhngefkjgehjf
Category: Web Project

Project 3

Title: HoverMorph
Tagline: A React library for custom animated cursors. A React library for animated, customizable cursors with responsive hover effects, enhancing UI interactions.
Year: 2024
Technologies: JavaScript, React
GitHub: https://github.com/Tejas160920/HoverMorph
Category: Open Source

Project 4

Title: Bird Flocking Simulation
Tagline: A parallel computing simulation of flocking behavior using Apache Spark.This project uses parallel processing to simulate flocking behavior, making the simulation run faster and smoother.
Year: 2024
Technologies: Apache Spark, Distributed Computing
GitHub: https://github.com/Tejas160920/FlockFlow-Parallel-Flocking-Simulation

Category: AI/Parallel Computing

Project 5

Title: Personal Portfolio
Tagline: A personal portfolio site to showcase my projects, skills, and experience.
Year: 2024
Technologies: React, Javascript
GitHub: https://github.com/Tejas160920/Portfolio
Demo: https://tejasgaikwad.vercel.app/
Category: Web Project

Project 6

Title: Brain Tumor
Tagline: Developed a deep learning model for brain tumor classification, achieving 75% accuracy on test data using CNNs.
Year: 2023
Technologies: Deep Learning, CNN
GitHub: https://github.com/Tejas160920/Brain-Tumor-Classification
Category: AI

Technical Skills

Programming Languages
- Expert: C++, Python
- Proficient: Java, JavaScript, R, HTML/CSS
- Familiar: GO

Frontend Development
- Frameworks: React, Next.js, React Native
- UI/UX: Tailwind CSS.
- State Management: Redux

Backend Development
- Frameworks: Spring Boot, Flask
- Databases: MongoDB,
- APIs: REST, GraphQL

DevOps & Cloud
- Cloud Platforms: AWS, Google Cloud
- Tools: Docker
- CI/CD: GitHub Actions

##Artificial Intelligence & Machine Learning
-Deep Learning: TensorFlow, PyTorch, YOLOv7/v8
-Computer Vision: OpenCV, Stereo Vision, Image Processing
-Natural Language Processing: Hugging Face, RVC (Voice Cloning), TTS Models
-Big Data & Distributed Computing: Apache Spark, Hadoop
-AI Optimization: Model Training & Hyperparameter Tuning

Licenses & Certifications

Bachelor of Science in Programming and Data Science

- Institution: Indian Institute of Technology(IIT), Madras
- Issued: August 2020- September 2021
-Courses: Mathematics for Data Science, Statistics for Data Science, Computational Thinking, Programming in Python
- link:https://drive.google.com/file/d/1sc5H3Rp9Q3dUGYH-iAe5h5aPTyr535iF/view?usp=sharing

Current Interests

-AI/Computer Vision
-Autonomous Systems
-Cloud Development
-Open Source Projects

Hobbies

- Traveling
- Hiking
- Reading
- Video Games *(Played Valorant Professionally)* 🎮
- Biking

Publications

Publication 1

Title: CropWeed Detection, Depth Estimation, and Disease Diagnosis
Journal: Springer Science+Business Media PCCDA 2023
Description: This research presents an AI-driven precision agriculture system that improves weed detection and disease diagnosis in crops. Using deep learning-based detection

techniques, the study demonstrated a 25% improvement in accuracy and was adopted by two agricultural research teams for real-world testing.
Date: 2023
Link: https://link.springer.com/chapter/10.1007/978-981-99-4626-6_5

Languages

- English (Fluent)
- Hindi (Fluent)
- Marathi(Native)

Volunteering

Volunteering 1

Organization: Utkarsh Social Initiative
Role: Science Educator & Volunteer
Start Date: July 2019
End Date: August 2019
Description: Conducted science education sessions for underprivileged students, simplifying complex physics, chemistry, and biology concepts.
Designed interactive experiments and demonstrations to make science engaging and practical.
Helped students develop a scientific mindset by encouraging curiosity, critical thinking, and problem-solving skills.