



BRIEF SUMMARY

I'm a third-year AIML engineer with a solid background in Python, C, C++, HTML, and SQL, and I'm genuinely excited about what I do! My passion for innovation and teamwork drives me to not just tackle engineering challenges but to think strategically about how we can create solutions that go beyond the immediate problem.

I always approach my projects with a mindset geared toward growth, looking for ways to enhance my skills while also helping my teammates shine. I'm a firm believer that success is best when it's shared, and I enjoy building a supportive environment where everyone feels empowered to contribute their ideas. Whether I'm fine-tuning a machine learning model or developing efficient database solutions, I see challenges as fantastic opportunities for learning and development.

My journey in AIML is fueled by a vision: I want to reach new heights in this field, not just for myself, but to help harness technology for the greater good. I'm committed to continuous improvement and view every new obstacle as a chance to innovate. With each line of code I write, I strive to create solutions that are not only effective but also meaningful.

I love collaborating with others and believe I bring a lot more than just technical skills to the team. I aim to be empathetic, adaptable, and dedicated to excellence. I take pride in aligning with team goals and using diverse perspectives to craft effective strategies that work for everyone.

Looking ahead, I can't wait to dive into the latest technologies and tackle complex problems that challenge the norm. My ultimate goal is to be part of exciting advancements in AIML while promoting a culture of growth and success for everyone involved. Together, I believe we can accomplish amazing things, one innovative solution at a time!

KEY EXPERTISE

Python programming C programming C++ programming HTML SQL Ethical hacking Cybersecurity Cryptography

EDUCATION

SIES Graduate School of Technology

2022 - 2026

B.E. - Artificial Intelligence & Machine Learning | CGPA: 7.34 / 10

Wamanrao Muranjan College of Commerce and science, Mumbai

2022

12th | MSBSHSE | Percentage: 62.67 / 100

St Gregorios Public school and junior college, Mumbai

2020

10th | MSBSHSE | Percentage: 84.80 / 100

INTERNSHIPS

ION Chemicals | Chemicals / Petrochemicals / Polymer

24 Dec, 2024 - Present

Python developer

Key Skills: Python Cuda YOLO Pytorch Tensorflow Machine learning OpenCV

Freight Container Defect Detection System

Abstract: Freight containers undergo significant wear and tear during transportation, leading to defects such as dents, cracks, and rust. Identifying these defects manually is time-consuming and prone to human error. This project aims to develop an automated defect detection system using traditional machine learning techniques and OpenCV. By analyzing images of containers, the system will identify and classify defects efficiently, reducing inspection time and improving accuracy.

Problem Statement: Freight container defects, if undetected, can lead to cargo damage, structural failures, and financial losses. Current inspection methods rely on manual observation, which is inconsistent and inefficient. There is a need for an automated system that can accurately detect and classify defects in freight containers using computer vision techniques.

CSRBOX in association with IBM | IT / Computers - Software

10 Jun, 2024 - 06 Jul, 2024

Intern

Key Skills:

Deep Learning Convolutional Neural Network Artificial intelligence IBM Watson IBM Cloud
Natural Language Processing Machine Learning

Internship focusing on implementation of AI and developing ML models using IBM Watson

▯ Model Development

Designing and implementing machine learning models using IBM Watson. Experimenting with algorithms and tuning hyperparameters.

▯ Model Training and Evaluation

Training models and evaluating performance. Implementing cross-validation.

▯ Created a Heart Attack Predictor using IBM Watson.

PROJECTS

Sentry-Auth

27 Feb, 2025 - 09 Mar, 2025

Team Size: 1

Key Skills:

WebAuthn & FIDO2 Authentication Node.js & Express.js PostgreSQL Cryptography React Restful API Design

SENTRY-AUTH is a passwordless authentication system designed for secure, scalable, and privacy-focused access control. It replaces traditional passwords with WebAuthn-based biometric verification, hardware tokens, and magic links. Built with Express.js and PostgreSQL, it ensures zero-knowledge authentication, eliminating password-related breaches and improving user experience. The system is GDPR & CCPA compliant, making it ideal for enterprises, finance, and government security applications.

Gesture Sketchpad

05 Jul, 2024 - 15 Oct, 2024

Mentor: Prof. Arundhati Das | Team Size: 4

Key Skills:

Python programming OpenCV Tensorflow Mediapipe Matplotlib Tkinter Model training Random forest classifier

Project Link: <https://github.com/STUDBOSS/GESTURE-SKETCHPAD>

The revolutionary SketchMate system, which combines computer vision with human interaction to create an innovative application. Through the utilization of MediaPipe and OpenCV, the system can precisely track hand movements in real-time, enabling users to effortlessly sketch, draw, and paint on a virtual canvas by gesturing with their hands. An important aspect of this system is its capability to anticipate shapes based on the user's drawn contours, made possible by a pre-trained machine learning model. This predictive feature enriches the user experience by offering intelligent suggestions and simplifying the creative process. The SketchMate system has great potential for a variety of uses, including education, art, and design. It provides a touchless, hygienic, and interactive method for learning and creating, making it particularly well-suited for classrooms, studios, and collaborative workspaces.

Find Friends

05 Jan, 2024 - 15 Apr, 2024

Mentor: Prof. Hrishikesh Vichore | Team Size: 4

Key Skills: Python programming Flask HTML Flask-mail JavaScript DSA Problem solving CSS

Project Link: <https://github.com/STUDBOSS/FIND-FRIENDS>

The "Find Friends" project is a dynamic and innovative platform designed to connect college students based on shared interests, hobbies, and other relevant factors. In today's bustling academic environments, making meaningful connections can be challenging, and this project aims to bridge that gap by leveraging technology to facilitate friendships and community building. Our platform employs advanced algorithms to match students with similar interests, ensuring compatibility and enhancing the likelihood of lasting connections. By incorporating user-provided data such as hobbies, academic pursuits, and personal preferences, the system generates personalized recommendations for potential friends. The project not only focuses on creating matches but also provides a space for students to engage in various activities together, fostering a sense of community within the college environment. From study groups to shared interest clubs, the "Find Friends" platform encourages collaboration and interaction among students who might not have otherwise crossed paths. In summary, this project aims to enhance the social experience of college life by leveraging technology to facilitate genuine connections among students. By harnessing the power of data-driven matching, "Find Friends" strives to create a more inclusive and supportive community within educational institutions.

Arcade Mania

05 Jul, 2023 - 25 Sep, 2023

Mentor: Prof. Monali Deshmukh | Team Size: 4

Key Skills: DSA Problem solving game development Text based graphics C programming

Project Link: <https://github.com/STUDBOSS/ARCADE-MANIA>

Arcade Mania is a collection of terminal-based mini-games developed in C, focusing on minimalistic yet engaging gameplay. The project leverages text-based graphics and C's capabilities to create entertaining and challenging experiences.

Key Aspects:

1. Game Development – A variety of terminal games, from text adventures to arcade-style challenges, showcasing C's versatility.
2. User Experience – Intuitive gameplay with responsive mechanics for seamless interaction in a text-based environment.
3. Graphics – ASCII-based visuals to enhance engagement and immersion.
4. Portability – Designed for cross-platform compatibility across different terminal environments.
5. Documentation – Detailed guides on development, code structure, and game execution.

SketchMate with AutoShape

14 Dec, 2024

Conference paper | Springer publications | Mentor: Dr. Varsha Patil | No. of Authors: 4

Key Skills:

Computer Vision Artificial intelligence Machine learning Python Tensorflow Image processing Mediapipe

"SketchMate with AutoShape" introduces an intelligent, sketch-based application that enhances user drawings through AI-driven auto-shape recognition. This research aims to bridge the gap between freehand drawing and precise geometric representation, making it valuable for designers, educators, and professionals.

The paper discusses:

- The existing research gap in current sketch-based applications, which often lack intuitive auto-correction features.
 - The problems being addressed, including inaccuracies in freehand drawing and the demand for real-time shape refinement.
 - Proposed solutions that employ OpenCV, machine learning algorithms, and shape detection techniques to automatically enhance sketches while preserving the artistic intent of the user.
- The study highlights the model's effectiveness through experimental validation and presents a roadmap for future improvements.

ACHIEVEMENTS

- o Finalist of X'ploitation - A Capture The Flag(CTF) competition.

ASSESSMENTS / CERTIFICATIONS

Getting started with Artificial intelligence

Key Skills: IBM Watson IBM Cloud AI Ethics Natural Language Processing

This course, issued by IBM SkillsBuild, provided a foundational understanding of Artificial Intelligence and its real-world applications. It introduced essential AI technologies, emphasizing their transformative potential across industries.

Key Highlights:

Core Concepts: Mastered fundamental AI principles, including machine learning, computer vision, and natural language processing.

Industry Applications: Explored AI use cases in domains like healthcare, retail, and finance.

AI Tools: Gained hands-on experience with IBM Watson and related technologies.

Ethics: Addressed critical issues like algorithmic bias and ethical decision-making in AI development.

Artificial Intelligence Fundamentals

Key Skills:

Artificial Intelligence Machine Learning Natural Language Processing Deep Learning IBM Watson

Model developing and deployment AI Ethics IBM Cloud

This course, certified by IBM SkillsBuild, provided a comprehensive introduction to the principles and technologies of Artificial Intelligence. It focused on equipping learners with foundational knowledge and practical insights into AI's transformative capabilities.

Key Highlights:

AI Foundations: Covered essential AI concepts, including deep learning, natural language processing, and machine learning.

Practical Applications: Explored real-world implementations of AI in sectors like healthcare, manufacturing, and finance.

AI Tools: Gained exposure to IBM Watson and its integration into AI workflows.

Ethical AI: Addressed critical topics like transparency, bias mitigation, and the development of responsible AI systems.

Project Management Fundamentals

Key Skills: Agile methodology Risk management Efficient communication Leadership Departmental collaboration

This program offered a comprehensive introduction to project management, covering essential tools, techniques, and methodologies. It emphasized practical skills to lead projects effectively from start to finish.

Key Highlights:

Project Phases: Learned to manage the project lifecycle, from initiation to closure.

Methodologies: Covered both traditional (Waterfall) and modern (Agile) project management strategies.

Tools and Techniques: Worked with essential tools like Gantt charts and project scheduling frameworks.

Leadership Skills: Focused on managing teams, engaging stakeholders, and resolving conflicts.

Risk Management: Developed strategies to anticipate risks and allocate resources efficiently while maintaining project quality.

PERSONAL INTERESTS / HOBBIES

- o Reading
- o Travelling
- o Listening to music

- o Football
- o Cricket
- o Formula 1 enthusiast
- o CTF competitions

WEB LINKS

- o Github - <https://github.com/STUDBOSS>

PERSONAL DETAILS

Gender: Male

Marital Status: Single

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