

# Akshay Bhat

Bachelor of Technology

Artificial Intelligence and Machine Learning  
B.M.S College Of Engineering,Bengaluru

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 GitHub Profile

 LinkedIn Profile

 Portfolio Website

## TECHNICAL SKILLS

- Languages:** C++ | Python | C | JavaScript | SQL | HTML | CSS
- Frameworks:** React.js | Next.js | Tailwind | Flask | TensorFlow | Scikit-learn
- Tools:** Git | Google Colab | GCP | Jupyter Notebook | MongoDB | MySQL | SQLite | Vercel | Render
- Course Work:** Data Structures | Databases | OOP | Computer Architecture | Machine Learning

## PERSONAL PROJECTS

- **CareBridgeAI**  | *Python, BART-base, React, Next.js, Flask* Sept 2025  
*AI-powered platform for immediate healthcare support and consultation simulation.*
  - Fine-tuned **BART-base** on medical dialogues using **Mixed Precision (FP16)** and **Gradient Accumulation**, optimizing memory throughput to achieve a **2.08 Validation Loss** over 3 epochs.
  - Developed a comprehensive support ecosystem featuring **automated resource geolocation**, community assistance modules, and **symptom-based triage**.
- **Alphawave**  | *Python, BERT, LSTM, Linear Regression, React, Next.js* Nov 2025  
*Comprehensive Fintech & EdTech platform for stock analysis and trading simulation.*
  - Engineered a real-time analysis pipeline using **BERT** (sentiment) and **LSTM** (forecasting), ensembled via **Linear Regression** to generate actionable risk scores.
  - Built a gamified ecosystem featuring virtual money trading, 1v1 competitions, and **trading psychology** mini-games to test emotional discipline.
- **FabrAIc**  | *Python, TensorFlow, ResNet50, React, Node.js, Pandas* Aug 2025  
*Intelligent Fashion-Tech platform for personalized wardrobe management and style automation.*
  - Fine-tuned a **ResNet50** architecture on the **DeepFashion** dataset (200k+ images), implementing a **multi-label classification** head to extract **25+ attributes** clothing attributes with high feature fidelity.
  - Built a smart inventory system that leverages the model's feature generator for **instant auto-tagging**, enabling complex filtering and outfit composition based on the detected attributes.
- **MoodQuest**  | *EfficientNet-B0, PyTorch, OpenCV, Flask, Next.js, MongoDB* Nov 2025  
*Real-time facial expression recognition and mental health monitoring platform.*
  - Secured **6<sup>th</sup> Place (National)** at a hackathon by delivering an MVP in **48 hours**, utilizing a fine-tuned **EfficientNet-B0** on the **FER-2013** dataset with transfer learning and data augmentation to maximize accuracy.
  - Developed a wellness ecosystem featuring real-time stress analysis and standard clinical assessments (**PHQ-9, GAD-7, PSS**) visualizing longitudinal mood trends via interactive Next.js dashboards.
  - Engineered a scalable architecture using **Flask** and **MongoDB** to handle video stream inference and user data.
- **HackArena**  | *Python, Flask, MongoDB, OAuth, Jinja2, Render* March 2025  
*Full-stack platform for seamless hackathon hosting and team management.*
  - Developed a centralized management platform for team formation, registration, and submission tracking using **Jinja2** templating for dynamic frontend rendering.
  - Integrated **Google OAuth** for secure authentication and deployed the fully **containerized application** on Render for public access.

## POSITIONS OF RESPONSIBILITY

- **Web Developer & UI Designer, AeroBMSCE Club**  
Designed UI/UX wireframes and design-to-code workflows for the club's web interface. 2025-Present
- **Organizing Committee Volunteer, Utsav (Cultural Fest)**  
Coordinated on-ground logistics and event operations. March 2025

## ACHIEVEMENTS

- **Top 6 Finish** at AiVerse 2.0 Hackathon Oct 2025  
Placed top 6 out of 100 teams in a 48hr Hackathon and engineered "MoodQuest," a real-time emotion detection system using PyTorch & OpenCV.
- **Top 15 Finish** at Phaseshift Tech Fest '25 Hackathon Sept 2025  
Selected as a finalist from a pool of 125 teams in a 24hr Hackathon and built "CareBridgeAI," an all-in-one multi-lingual support ecosystem featuring a fine-tuned medical AI assistant for refugees.