

Profile Summary

Passionate AI/ML engineering student with hands-on experience in building customized language models, fine-tuning transformers, and deploying creative, character-driven voice AI projects. innovative ideas into practical tools using modern AI frameworks and cloud technologies.

Education

**B.Tech in CSE (AI/ML Specialization) Vishwakarma University,
Pune**

Aug. 2023 – May 2027

Work Experience Python/AI

Intern

June 2025 – Present

- Developed an **AI-powered healthcare IVR system** using LangGraph and Retrieval- Augmented Generation (RAG) deployed via AWS Lambda and API Gateway for scalable, serverless execution.
 - Integrated **multi-channel communication** within a unified system:
 - **IVR calls** via Twilio, with dynamic appointment reminders and AI-powered query resolution.
 - **Email delivery** via SMTP/AWS SES and **SMS notifications** via AWS SNS.
 - Designed conversational flows for appointment reminders and automated query handling, reducing the need for manual telecalling in production-ready environment
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Research Experience

Rubric-Based AI Response Evaluation ([Link](#))

July 2025

- Conducted internal research for a client seeking **mentor-style AI judges** (e.g., Lincoln, Mother Teresa) to grade responses based on defined rubrics.
 - Adapted a **10-point rubric** provided by the manager into an optimized **5-point metric** through iterative trial-and-error.
 - Evaluated **GPT-4** under varying configurations (e.g., temperature 0.1 / top-p 1.00 and temperature 0.40 / top-p 0.85).
 - Measured **consistency, accuracy, and qualitative alignment** of outputs with target mentor personas.
 - Produced a detailed findings document to guide future **rubric-based automated evaluation frameworks**.
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Projects

HouseGPT (Under Development)- Sarcastic Voice AI Chatbot ([IPYNB Link](#))

June. 2025 – Present

- Fine-tuned Google Flan-T5-Large using LoRA, trained with prompt engineering and belief-core context.
 - Created and curated a custom dataset from character-specific quotes, personality traits, and contextual sarcasm.
 - Integrated Retrieval-Augmented Generation (RAG) using FAISS and Sentence Transformers for contextual replies.
 - Faced and overcame resource limitations as a student, emphasizing creative dataset design and efficient model usage.
 - **Technologies:** Python | Hugging Face Transformers | FAISS | Sentence Transformers | Weights & Biases | XTTS | Prompt Engineering | Google Colab | GitHub | Kaggle
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Moodify - Affective Computing Music Recommendation System ([Link](#))

May. 2025 – June 2025

- Developed a web application that detects user's mood through emoji slider and text input to recommend mood-matched music.
 - Built a chat interface component enabling users to describe their emotional states through natural language.
 - Designed a responsive UI in React with an interactive slider and conversational interface.
 - Used Spotify API (PKCE flow) to fetch personalized playlists based on detected mood.
 - Hosted on GitHub Pages. Established Vercel deployment workflow with automatic redirection between landing page and application.
 - **Technologies:** React.js | JavaScript | Hugging Face | Spotify Web API | Tailwind CSS | Git | GitHub Pages
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CartPole Reinforcement Learning Agent ([Link](#))

Aug. 2025

- Implemented and trained a reinforcement learning agent using **DQN (Deep Q-Network)** in the Gymnasium CartPole-v1 environment.
 - Optimized agent performance through iterative training (100k+ timesteps), achieving average rewards close to the environment's maximum (200).
 - Designed modular pipeline with train, test, and plot modes for repeatable experiments and visualization.
 - Recorded and documented **before vs. after performance videos** and plotted reward curves for clear demonstration of learning progress.
 - **Technologies:** Python | Stable-Baselines3 | Gymnasium | Matplotlib | PyTorch
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Daily Affirmation Delivery Bot

June. 2025

- Built a no-code automation using Make.com and Telegram Bot API to send personalized affirmations twice daily (morning and night).
 - Configured time-based triggers and dynamic message formatting for consistent self-check-in reminders.
 - Used Make.com's scheduling and Telegram modules to fully automate delivery, eliminating manual effort and improving mental wellness consistency.
 - **Outcome:** Enhanced productivity and focus by embedding positive habit loops into the daily routine.
 - **Technologies:** Make.com, Telegram Bot API, No-Code
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Technical Skills

- **Programming Languages:** Python, SQL, C, C++, JavaScript, HTML, CSS, SQL (basic), R Programming
 - **Libraries/Tools:** Pandas, NumPy, Matplotlib, Scikit-learn, Hugging Face Transformers
 - **Machine Learning/ Frameworks:** Hugging Face, Classification, Regression, Clustering (basic understanding)
 - **AI/Cloud Platforms:** AWS (Amazon API Gateway, Amazon Bedrock, Game Hosting, Amazon Q), Google Colab, Jupyter Notebook.
 - **AI Tools:** ChatGPT, Claude, Gemini, CoPilot, Fooocus.
 - **Core Skills:** Sentiment Analysis, AI Model Deployment, Prompt Engineering, Front-End Development, API Integration.
 - **EDA Knowledge:** Univariate, Bivariate, and basic Multivariate analysis
 - **Visualization Tools:** IBM Cognos, Power BI
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Certifications

- **Introduction to Amazon API Gateway:** Designed and deployed APIs for cloud-based applications (*Completed: July 2024*).
 - **AWS Certified Cloud (Getting Started with Games):** Focused on foundational AWS services for game hosting and cloud (*Completed: Feb. 2024*).
 - **Amazon Bedrock Generative AI Certification:** Proficient in deploying and managing generative AI models (*Completed: Aug. 2024*).
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Achievements

- Winner of multiple gaming tournaments, including *The Finals*, showcasing teamwork and competitive problem-solving.
 - Successfully managed and moderated a college hackathon, fostering innovation and collaboration among participants.
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Interests

- **AI Research:** Exploring multi-party computation (MPC) and blockchain-based agents for on-chain transactions.
 - Currently developing HouseGPT v2 with advanced RAG support and broader knowledge scope
 - **Public Speaking & Writing:** Simplifying AI concepts through blogs and tutorials to inspire and educate others.
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