Shashwat Singhal

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Summary

Final-year Computer Science student with hands-on experience building AI systems using large language models and agent workflows. Projects include deep learning for medical imaging and intelligent systems for assistive tech. Practical exposure to tools like LangChain, Azure, TensorFlow, and AutoGen. Focused on building systems that are simple to use, easy to understand, and reliable in solving real problems. Open to relocation across India.

Education

MIT World Peace University, Pune — Expected Grad – Aug 2025
BTech, Computer Science and Engineering — ***CGPA –*** 9 29 / 10

Namo Rims Junior College, Pune — Aug 2019 – Jul 2021
MSBSHSE, 12th Grade — ***Pct –*** 91.5%

Indira National School, Pune — Aug 2017 – Jun 2019
CBSE, 10th Grade — ***Pct –*** 89.8%

Experience

Generative AI Research Intern — **DisruptiveNext, Pune** — Dec 2024 – Jun 2025

- Designed LLM agent workflows using AutoGen and MCP tools for asynchronous tool calls and reasoning steps.
- Integrated LangSmith in scraping pipelines, improving traceability and debugging across multiple agents.
- Built context-aware bots using Azure Bot Service and OpenAI, optimized through clear prompt-objective pairs.
- Used GitHub Copilot and Gemini API to assist development and map reasoning flows on Miro for clarity.

Projects Accomplished

Brain Tumor Classification — Nov 2024

- Built a brain tumor classifier using CNN and Xception on 5,256 MRI images.
- Improved accuracy to 99.8% by using ImageNet weights and comparing multiple architectures.
- *Key elements* – TensorFlow · Kaggle · Neural Network Models (Xception, Inception V3, CNN)

Threat Object Classification — May 2024

- Developed a CNN model to detect threat/no-threat objects from real-world images for blind assistive tech.
- Achieved 95% accuracy by tuning architecture, learning rate, and training parameters.
- *Key elements* – TensorFlow · Kaggle · CNN Model · Open CV

Certifications

DeepLearning.AI Data Analytics — Jun 2025
Analytics Foundations · Applied Statistics for Data Analytics · Python for Data Analytics · Data I/O and Preprocessing with Python and SQL · Data Storytelling

DeepLearning.AI TensorFlow Developer — Aug 2023
Introduction to TensorFlow for AI, ML, and DL · Convolutional Neural Networks in TensorFlow · Natural Language Processing in TensorFlow · Sequences, Time Series and Prediction

MySQL Basics — Mar 2023

Skills

Programming & Environments: Python · SQL · GitHub & Copilot · Cursor · Visual Studio Code · UV Virtual Environment · Anaconda Jupyter

Tools & Technologies: Generative AI · Gemini API · OpenAI API · TensorFlow · Nvidia CUDA · MCP (Model Context Protocol) · Telemetry · Power BI · Azure (Bot Framework, Bot Services) · Blockchain · Computer Graphics