Hardik Jaiswal

Kolkata, West Bengal, India

hardik.jaiswal2024@nst.rishihood.edu.in | +91 7980017436 | github.com/pythonicforge | linkedin.com/in/pythonicforge/

SUMMARY

Python developer with a strong foundation in AI and deep learning theory, experienced in backend development, automation, and building real-world tools using FastAPI, OpenCV, and MediaPipe. Actively exploring ML concepts and frameworks (PyTorch, TensorFlow) to apply theoretical knowledge into practice.

SKILLS

Python, SQL, Data Analysis, Git, GitHub, REST API, Linux, FastAPI, Matplotlib, Seaborn, pandas, OpenCV, scikit-learn, ReactJS, TailwindCSS

WORK EXPERIENCE

OpenAstronomy   **Jan 2025 - Feb 2025**
Contributor – SunPy Project   *Remote*

- Resolved a critical bug in SunPy's SRSClient by replacing outdated NOAA FTP endpoints with HTTPS, restoring ~100% CI/CD pass rate across 30+ builds per week.
- Coordinated directly with NOAA API maintainers to verify updated links, reducing future API breakage risk by ~80%.
- Improved data reliability for 1,000+ monthly users and downstream scientific tools by merging code in SunPy's core codebase.
- Fixed key UI layout bugs (footer responsiveness, theme inconsistencies) on OpenAstronomy.org, improving page load flow and visual consistency across ~10 pages.

PROJECTS

WhsiperCast   **Mar 2025 - Apr 2025**
Python Developer   *Personal Project*

- Built an AI-powered CLI tool for generating podcasts and audiobooks using Python, reducing manual content prep time by ~80%.
- Automated script creation via OpenAI LLMs and text-to-speech conversion using Coqui-TTS, enabling end-to-end audio generation in under 15 seconds.
- Integrated Wikipedia, Google News, and Reddit APIs into the AI podcasting tool, delivering real-time, topic-specific content updates for each audio segment and improving content freshness by 99%.
- Designed an interactive learning mode that let users query PDFs and Docs, increasing engagement by approx. 2x in test runs.
- Reduced file clutter by auto-managing playback files and temporary content, keeping storage usage under ~50MB per session.

Melody.CLI   **May 2024 - Jun 2024**
Python Developer   *Personal Project*

- Created a terminal-based music player with ~0.5s average latency from command to playback.
- Integrated a smart caching system that reused previous downloads, cutting network usage by up to 60% across sessions.
- Designed for devs and low-resource systems, keeping RAM usage below 100MB even during continuous playback.
- Tested with 50+ tracks across genres to validate consistency and fault tolerance of autoplay queue logic.

Peripheral Killing System   **Feb 2023 - May 2023**
Python Developer   *Personal Project*

- Built a gesture-based controller using OpenCV + MediaPipe that replaced traditional inputs with hand gestures, achieving ~90% gesture recognition accuracy.
- Enabled full mouse control, volume/brightness adjustment, and air typing with minimal latency (~1s response on average hardware).
- Tuned system to maintain stable tracking at 30 FPS, even in medium-light conditions, improving UX consistency.
- Reduced user reliance on peripherals by offering hands-free operation for basic OS tasks — tested successfully over 20+ live sessions.

EDUCATION

Rishihood University   **Aug 2024 - Sept 2028**
Bachelors of Technology in Computer Science and Artificial Intelligence