

Vinayak Mishra

SKILLS

Experienced in building AI projects with web-based visualizations using **Python libraries** such as **PyTorch, Django, NumPy, Matplotlib, Pygame, and Plotly**. Proficient in **Java, C, and SQL**, with hands-on experience in real-world development workflows using **Git/GitHub**. Skilled with multiple IDEs, including **VS Code, PyCharm, Jupyter, IntelliJ**, Google Colab, and Gedit (Linux). Possess foundational **web development** skills in **HTML, CSS, and JavaScript**.

Github Profile : <https://github.com/Vinayak2005917>

Projects

Sorting Algorithms Visualizer – Python,pygame

- Developed an interactive Python app using Pygame to visualize sorting algorithms with real-time visuals and audio feedback.
- Implemented Bubble, Insertion, Selection, Quick, and Merge Sort with color-coded progress and performance timers.
- Designed an intuitive UI with algorithm selection, reset functionality, resizable window, and sound effects for enhanced learning experience.

Github Repository : <https://github.com/Vinayak2005917/Sort-with-pygame>

Search Project – Python,Flask,JavaScript

- Built a web application using Flask backend and JavaScript frontend to demonstrate string search algorithms with fast, case-insensitive search and real-time highlighting.
- Implemented Linear Search, Horspool, and Boyer-Moore algorithms with instant result display and search time tracking.
- Designed a clean, responsive UI with filter buttons to select algorithms and highlight matches for improved user experience.

Github Repository : <https://github.com/Vinayak2005917/Search-Project-Flask->

Smart India Hackathon Project – Django,SQLite

- led a team to develop a comprehensive educational content management platform featuring multi-format file processing, role-based access control using Django and SQLite.
- Oversaw project planning, task delegation, and coordinated development efforts to implement user management, API endpoints, and a robust file upload system supporting PDFs, Excel, and BibTeX formats.
- Ensured codebase organization, detailed documentation, and deployment readiness, resulting in a professional, scalable solution tailored for educational institutions.

Github Repository : <https://github.com/Vinayak2005917/SIH-Hackthon-project>

EDUCATION

A.M.C College of Engineering, Location – B.E Computer Science Engineering

Aug 2023 – Aug 2027, Bengaluru

LinkedIn profile : <https://www.linkedin.com/in/vinayak-mishra-82a062291/>