Ashu Sangar

Pittsburgh 15213 || (570) 856-6629 || ashu.sangar.dev@gmail.com || ashusangar.com || Github

EDUCATION

University of Pittsburgh

BS in Computer Science and Minor in Statistics

Coursework: Data Structures & Algorithms + OOP, Computer Assembly, Web Design, Software Engineering, Operating Systems, Computer Graphics, and Natural Language Processing.

Experience

Neuraville   *January - April 2025*

Software Engineer

- Optimized performance of the FEAGI-Blender integration, improving real-time data handling by 40%, resulting in smoother animations and increased responsiveness.
- Developed Python scripts and utilities to automate JSON configuration generation from complex rig structures, reducing manual effort by 80%.
- Identified and resolved critical bottlenecks, increasing system responsiveness by 30% and enabling scalability for future enhancements.
- Enabled 95% accuracy in the manipulation of 3D models and animations, ensuring precise control and interaction.

Outlier AI   *April - December 2024*

Prompt Engineer

- Developed and optimized over 50 AI prompts, improving response accuracy by 25% and enhancing contextual relevance in AI-generated outputs.
- Designed and executed 20+ stress-test prompts, revealing vulnerabilities and guiding enhancements that boosted model robustness by 30%.
- Analyzed response data to identify behavioral patterns, facilitating strategic refinements in AI training and development methodologies.

Personal Projects

Legal Precedent Retrieval System using NLP| *Python*   *April 2025*

Developed a natural language processing system to efficiently retrieve and rank relevant legal precedents from court case datasets. Compared keyword-based retrieval (BM25) with advanced transformer-based methods (ColBERT/BERT), significantly improving precision and recall metrics. Built and evaluated citation networks for approximately 59,000 Pennsylvania court cases to assess retrieval system performance and validate results.

Personalized Music Visualization For Spotify | *Next.js*   *June 2024*

Created a web application leveraging Spotify's API to visualize users' top albums and artists dynamically. The platform features an interactive grid display of top albums, allowing users to explore their listening habits in a visually appealing format, with integrated functionalities for exporting visuals and enhancing social sharing capabilities across platforms.

SKILLS

Programming Languages: Java, Python (Pandas, Pygame, SQL), C, HTML, CSS, JavaScript, TypeScript, React, Node.js.

Software & Methods: Docker, OpenCV, Git, GitHub, SDL, Dropbox, Google Drive, Apple Cloud

Development Practices: Agile Methodologies, Version Control, Pair Programming, Unit Testing