Yash Agarwal

+91-90276-01476 | 190e785@gmail.com | linkedin.com/in/yash-agarwal-190e785 | github.com/190-785

EDUCATION

Graphic Era Hill University   *Uttarakhand, India*
B.Tech. in Computer Science & Engineering; Honors in ML & AI   *Aug 2023 – Present*

EXPERIENCE

Web Developer Intern   *May 2025 – July 2025*
Arterns Technologies Private Limited   *Dehradun, Uttarakhand*
- Engineered a data-driven Applicant Tracking System (ATS) and student assessment module for **menticate.com**, managing complex user data flows.
- Developed and integrated multiple user-centric features, including a real-time chat API and a site-wide dark theme to enhance user experience.
- Refactored the **vedichealings.com** codebase by implementing the i18next library, successfully launching full Spanish language support.
- Reduced project timeline overruns by 20% by proactively identifying risks and implementing mitigation strategies in a fast-paced Agile environment.

PROJECTS

Data Traversal and Caching System   *Oct 2024 – Dec 2024*
- **Tech Stack:** Python, Flask, BeautifulSoup, Redis, MongoDB, Docker
- Developed a backend service to analyze and map complex data pathways from a given starting point within the Wikipedia dataset, implementing algorithms for loop and dead-end detection.
- Integrated Redis caching to store frequently accessed paths and utilized MongoDB for persistent storage, enhancing system performance and scalability.
- **Outcome:** Achieved an 80% optimization in data processing and pathfinding runtime, significantly improving efficiency and reducing computational overhead.

Interactive 3D Data Visualization Platform   *Feb 2025 – May 2025*
- **Tech Stack:** React, Three.js, MongoDB, Spring Boot, WebSockets
- Architected a full-stack application to transform structured user data into an immersive 3D environment, creating a novel data visualization interface.
- Implemented secure JWT authentication for data protection and utilized WebSockets to enable real-time multi-user collaboration and data synchronization.
- **Outcome:** Delivered a highly interactive platform that increased user engagement by presenting complex data in an intuitive, personalized visual format.

IoT-Based Telemetry and Automation System   *Jun 2025 – Jul 2025*
- **Tech Stack:** ESP8266, Firebase, ESPAsyncWebServer, C++
- Designed and built an autonomous system to collect and log real-time telemetry data (e.g., soil moisture) to a Firebase cloud backend for remote analysis and management.
- Developed a secure web portal for system configuration and authenticated real-time data logging to Firebase, ensuring data integrity.
- **Outcome:** Improved resource conservation by achieving a 20% increase in watering efficiency through data-driven automation and remote monitoring.

TECHNICAL SKILLS

Languages: Java, Python, JavaScript, TypeScript, C++
Data & Analysis: Python (Pandas, NumPy), scikit-learn, Matplotlib, TensorFlow, Microsoft Excel (Advanced)
Frameworks: React, Next.js, Node.js, Flask, Spring Boot
Databases & Storage: MongoDB, Firebase, Redis
Developer Tools: Git, Docker, BeautifulSoup, Postman

SOFT SKILLS

Agile Collaboration, Analytical Problem-Solving, Communication, High Attention to Detail, Teamwork, Adaptability