

Yash Agarwal

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EDUCATION

Graphic Era Hill University

B.Tech. in Computer Science & Engineering; Honors in ML & AI

Uttarakhand, India

Aug 2023 – May 2027 (Expected)

EXPERIENCE

Web Developer Intern

Arterns Technologies Private Limited

May 2025 – July 2025

Dehradun, Uttarakhand

- Developed and launched a responsive Applicant Tracking System (ATS) using **Next.js** (**React**), enhancing recruitment workflow efficiency for **menticate.com**.
- Engineered a real-time chat feature leveraging WebSocket APIs and implemented a site-wide dark theme, improving user engagement and accessibility.
- Architected the internationalization (i18n) of **vedichealings.com** by integrating the i18next library, enabling full Spanish language support.
- Operated in an Agile development environment, contributing to a 20% reduction in project timeline overruns by proactively identifying and mitigating risks.

PROJECTS

Interactive 3D Resume Builder

Feb 2025 – May 2025

- Tech Stack:** React, Three.js, JavaScript, WebSockets, Spring Boot, MongoDB
- Architected a dynamic, component-based frontend using **React** and **Three.js** to visualize resume data in an immersive 3D environment.
- Managed complex application state for user data and 3D interactions; implemented secure JWT authentication and real-time collaboration using WebSockets.
- Outcome:** Delivered a novel, highly interactive resume experience, leading to increased user engagement compared to traditional formats.

Wikipedia Path Finder

Oct 2024 – Dec 2024

- Tech Stack:** Python, Flask, Redis, MongoDB, Docker, BeautifulSoup
- Engineered a backend service to solve the "Philosophy Game" by implementing a graph traversal algorithm (**Depth-First Search**) to find the path between Wikipedia pages.
- Leveraged Redis for caching computed paths and containerized the application with Docker, ensuring scalability and faster response times under load.
- Outcome:** Achieved an 80% reduction in average response time through optimized algorithms and caching, demonstrating strong problem-solving skills.

IoT Automatic Plant Watering System

Jun 2025 – Jul 2025

- Tech Stack:** C++, ESP8266, Firebase, ESPAsyncWebServer
- Designed an autonomous system using an ESP8266 microcontroller to monitor soil moisture and dispense water, showcasing full-cycle hardware and software integration.
- Developed a secure web portal for Wi-Fi configuration and logged real-time telemetry data to Firebase using token-based authentication.

TECHNICAL SKILLS

Frontend: React.js, Redux, JavaScript (ES6+), TypeScript, HTML5, CSS3, Next.js

Backend: Node.js, Python, Java, Spring Boot, Flask, REST APIs

Databases & Storage: SQL (PostgreSQL), MongoDB, Firebase, Redis

Developer Tools & Concepts: Git, Docker, WebSockets, Postman, Agile Methodologies

SOFT SKILLS

Agile Collaboration, Problem-solving, Communication, Teamwork, Adaptability