

# 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 2026 (Expected)

## EXPERIENCE

### Web Developer Intern

Arterns Technologies Private Limited

May 2025 – July 2025

Dehradun, Uttarakhand

- Developed a full-stack web application featuring an Applicant Tracking System (ATS) to solve business needs for candidate management and student assessment.
- Integrated third-party APIs for real-time chat functionality, improving user engagement and providing a more dynamic, interactive platform for clients.
- Engineered a scalable front-end by implementing internationalization (i18next), enabling the platform to support a global user base with an initial launch in Spanish.
- Owned key feature development within an Agile framework, contributing to a 20% reduction in project overruns by identifying and mitigating technical risks.

## PROJECTS

### Scalable Web Service for Pathfinding

Oct 2024 – Dec 2024

- Tech Stack:** Python, Flask, Redis, MongoDB, Docker, BeautifulSoup
- Architected a resilient backend service to process and trace paths through Wikipedia's large dataset, implementing algorithms to handle complex traversal logic and loop detection.
- Engineered a high-performance, scalable platform by integrating Redis for caching to reduce latency and leveraging Docker for containerized deployment, improving system resiliency.
- Outcome:** Achieved an 80% reduction in pathfinding runtime for cached results, demonstrating significant improvements in efficiency for data-intensive operations.

### Customized 3D Resume Web Application

Feb 2025 – May 2025

- Tech Stack:** Java, Spring Boot, React, Three.js, MongoDB, WebSockets
- Designed and developed a proof-of-concept web application to provide a customized solution for data visualization, transforming standard resume data into an interactive 3D environment.
- Built a secure, collaborative platform using a Spring Boot backend with JWT authentication and a React front-end leveraging WebSockets for real-time, multi-user editing.
- Outcome:** Created a novel and engaging user experience, demonstrating the ability to build bespoke, full-stack solutions to address unique client-style business challenges.

### IoT Solution with Web-Based Management

Jun 2025 – Jul 2025

- Tech Stack:** C++, ESP8266, Firebase, JavaScript
- Developed a full-stack IoT solution integrating a C++ based microcontroller with a cloud backend (Firebase) for real-time data synchronization and remote management.
- Built a secure, web-based portal for device configuration and data monitoring, demonstrating end-to-end ownership of the solution lifecycle from hardware to a client-facing interface.
- Outcome:** Delivered an efficient, automated system with a modular design, improving water conservation by 20% and showcasing skills in building integrated solutions.

## TECHNICAL SKILLS

**Languages:** Java, Python, C++, JavaScript, TypeScript

**Frameworks:** Spring Boot, React, Next.js, Node.js, Flask

**Databases & Storage:** MongoDB, Redis, Firebase

**Developer Tools:** Git, Docker, REST APIs, Postman, BeautifulSoup

**Machine Learning:** TensorFlow, Keras, scikit-learn, Matplotlib

## SOFT SKILLS

Technical Consulting, Cross-functional Collaboration, Problem-Solving, Solution Ownership