Ansh Pachauri

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EDUCATION

The Ohio State University, College of Engineering

Bachelor's of Science in Computer Science and Engineering

Specializing in Software Engineering

Relevant Coursework: Software Engineering, Data Structures & Algorithms, Machine Learning, Distributed Enterprise Computing, Database Systems, Web Development, Operating Systems, Artificial Intelligence, Quantum Computing, Networking, Principles of Programming Languages, Object-Oriented Programming.

PROFESSIONAL EXPERIENCE

NMT Security

Tinton Falls, NJ

GPA: 3.6/4.0

Product Development and AI Integration Intern

May 2025- August 2025

Expected Graduation Date: May 2026

- Architected and deployed a full-stack AI chatbot solution on AWS to solve real-world user queries, collaborating on backend engineering with Python and AWS Lambda, and integrating Amazon Bedrock for advanced conversational intelligence and natural language understanding.
- Developed robust Python scripts to automate cybersecurity analysis tasks, integrating APIs (VirusTotal, OTX) for threat intelligence, and demonstrating proficiency in building scalable tools for end-to-end data processing, automation, and secure platform integration.

Deloitte

Technology Consulting Virtual Intern

June 2021 - September 2021

• Expedited team document search by 10 hours/month by migrating 100+ reports to a centralized cloud repository, while also reducing client deployment delays by 30% and saving \$5K+ annually through diagnosing integration bottlenecks and implementing AWS automation tools.

Verzeo Edutech

Remote

Remote

Student Intern

April 2021 - May 2021

- Delivered 4 AI projects (e.g., facial recognition, traffic sign detection) with 90%+ accuracy using Python/CNNs, adopted by 5+ peers.
- Led 20 peers to complete projects 2 weeks early using Agile task delegation.

PROJECTS

E-commerce Platform (Ongoing) (React.js, Node.js, AWS Lambda, DynamoDB, API Gateway)

August 2025 – present

- Developed and deployed the backend infrastructure (Node.js, AWS Lambda/DynamoDB) powering all business logic for the site.
- Built the buying workflow (user checkout, details, confirmation), contacts page, and improved core UI for optimal user experience.

RecipeShare - Social Recipe Network (Next.js, TypeScript, Go, PostgreSQL, AWS S3/RDS, Tailwind CSS) September 2025 - October 2025

- Solely built an Instagram-inspired social media platform for recipes, featuring account sign up/login, follow system, real-time notifications, commenting, liking, and profile management (posts, followers, following, profile photo, bio, and settings for updating or deleting account).
- Engineered advanced features including post creation (recipes/photos), user and post search, scalable backend APIs (Go, PostgreSQL), secure JWT authentication, AWS S3 media storage, and a responsive, modern UI with Next.js and Tailwind CSS.

Core Language Interpreter (Java)

January 2025 – April 2025

• Designed and implemented a comprehensive interpreter with lexical analysis, parsing, and recursive-descent execution; incorporated robust memory management, reference-counting garbage collection, and extensive syntax/semantic checks for reliable execution and error handling.

Machine Learning & AI Class Projects (Python)

January 2025 – April 2025

• Engineered 4 major machine learning algorithms from scratch using Python and NumPy, including search algorithms (DFS, BFS, UCS, A*), linear regression, Naive Bayes classification, and neural networks (Logistic Regression, Perceptron), achieving 74%+ accuracy on Twitter sentiment analysis with robust data processing pipelines and production-ready optimization techniques.

PeerEval - Academic Assessment Platform (Ruby on Rails 7.2, SQLite3, Bootstrap 5)

August 2024 – December 2024

• Developed a full-stack CRUD platform for 200+ students, reducing submission errors by 35%, improving SQL query speeds by 2s/request, and communicating technical progress and performance in presentations to peers and instructors throughout the development cycle.

LEADERSHIP & INVOLVEMENT

$\textbf{The Quantum Computing Club at Ohio State} \mid \textit{Founder and President}$

March 2025 – present

• Launched the university's first quantum computing organization by leading entrepreneurial and outreach efforts, building cross-functional relationships with faculty and student groups, recruiting an executive board, and expanding membership through targeted initiatives.

Student Life | The Ohio State University | Resident Advisor

August 2024 – present

• Led community-building initiatives as a Resident Assistant, boosting resident participation by 40% through creating and organizing 15+ events and workshops tailored to diverse interests; maintained a 95% satisfaction rate and resolved 10+ policy conflicts by fostering an inclusive, supportive living environment and providing proactive, empathetic outreach and conflict resolution for residents.

SKILLS

- Programming Languages: Java, Python, JavaScript (Node.js, React, Next.js, TypeScript), Go, Ruby, SQL, HTML, C
- Frameworks/Libraries: Node.js, React, Next.js, Ruby on Rails, Tailwind CSS, TensorFlow, OpenCV, NumPy, Agile
- Cloud & Tools: AWS (Lambda, Bedrock, Lex, S3, RDS, EC2, DynamoDB, API Gateway), Jupyter Notebook, GitHub, Eclipse, MySQL, PostgreSQL, MATLAB, SQLite3, Bootstrap
- Certifications: "Certified AI Practitioner" by AWS, "Certified Cloud Practitioner" by AWS
- Research Paper: "Fake News Detection using Machine Learning and Natural Language Processing," 2021 International Conference on Technological Advancements and Innovations (ICTAI), Tashkent, Uzbekistan, 2021, pp. 547-552, doi: .1109/ICTA153825.2021.9673378. (22 citations)