



YUVRAJ SINGH CHOWDHARY

Senior Undergraduate

Department of Computer Science and Engineering

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EDUCATION

Year	Qualification	School/Institute	CPI/%
2021 - Present	B. Tech.	Netaji Subhas University of Technology, Delhi	8.97 /10.0
2020	Intermediate/+2	Abhinav Public School, Delhi	89.4%
2018	Matriculation	St. Joseph's Convent Sen. School, Bathinda	94.6%

WORK EXPERIENCE

HCLTech, Noida

Software Associate Engineer Intern June 2024 - Present

- Revitalized database performance with advanced indexing and multi-layer caching, achieving 35% faster retrieval and 30% quicker responses. Automated task scheduling using Python and RabbitMQ, reducing manual processes by 25% and boosting reliability by 20%. Designed for scalability and microservices.
- Modernized legacy codebase with CI/CD pipelines, cutting technical debt by 40% and accelerating deployments through automated reviews. Implemented real-time monitoring with Prometheus and Grafana, lowering downtime by 50%.
- Scaled system capacity to manage 2x the transactions by addressing bottlenecks and utilizing AWS for horizontal scaling. Employed Docker for containerization, reducing deployment times by 60%.

IGDTUW, Delhi

ML Research Intern February 2024 - April 2024

- Authored the research paper "GAFNet: A Hybrid Approach for Autonomous Driving", integrating Genetic Algorithms with Neural Networks, achieving a 20% increase in vehicle reliability, 15% improvement in decision-making accuracy, 35% reduction in computational load, and 30% faster convergence with 20% shorter training time for real-time applications.

SCHOLASTIC ACHIEVEMENTS

- Achieved Kaggle Expert ranking by delivering advanced machine learning solutions across 25+ projects (2024)
- Microsoft Certified GenAI Developer, demonstrating expertise in generative AI technologies (2024)
- Ranked 5-star rating on HackerRank for exceptional SQL proficiency (2024)
- Solved 300+ coding problems on LeetCode and Code 360 @Naukri (2024)
- Recognized as a CVPSK Scholar for exceptional academic performance in the 3rd semester, achieving a 9.8 SGPA and ranking in the top 1% of students at NSUT Delhi (2023)
- Awarded KVPY-SX scholarship 2019, conducted by Department of Science and Technology (DST), GOI (2020)

RESEARCH PUBLICATIONS

Yuvraj Singh Chowdhary and Geetika Singh, "The Convergence of IoT and 5G: 2nd Int'l Conf. on Intelligent Cyber Physical Systems & IoT, Aug 2024, JCT College, Coimbatore.

TECHNICAL SKILLS

- Languages: Python | JavaScript | C/C++ | SQL | Solidity
- Libraries & Frameworks: React | Redux | Node.js | Express | Flask | FastAPI | Keras | TensorFlow | Scikit-learn | Tailwind CSS
- Tools & Platforms: Git | Docker | Kubernetes | CI/CD | Jupyter | Figma | Google Firebase | Power BI | AWS | GCP | Azure
- Databases: MongoDB | PostgreSQL | MySQL | Redis | Oracle Autonomous Database
- Technologies: MERN Stack | REST APIs | DevOps | Machine Learning | Generative AI | Blockchain

PROJECTS

High-Speed Caching Proxy Server

Link

Prof. R.S. Raw, NSUT

April 2024 - June 2024

- Engineered a high-performance proxy server with C, OpenSSL, and POSIX sockets, achieving 25% improvement in response speed through advanced caching and multi-threaded processing.

Simulation for Self Driving Car

Link

Prof. Ritu Rani, IGDTUW

January 2024 - March 2024

- Pioneered a self-driving car simulation with 95% accuracy using Python, TensorFlow, and OpenAI Gym, focusing on real-time decision-making and autonomous navigation.

Context-Aware Discord Bot

Link

Prof. Ritu Rani, IGDTUW

November 2023 - December 2023

- Developed a sophisticated Discord bot managing 15 conversation contexts with Python, Discord API, and Gemini API, enhancing UI through adaptive, context-aware dialogues.

Optimized PDF Interaction Chatbot

Link

Prof. Ritu Rani, IGDTUW

July 2023 - August 2023

- Refined a PDF interaction chatbot, improving access speed by 40% using Python, Streamlit, and OpenAI API, focusing on user-friendly document retrieval.

LEADERSHIP EXPERIENCE

Project Lead, Project CLAIR

Enactus NSUT, Delhi

March 2023 - December 2023

- Developed air purifier for 50,000+ residents, won 1st place at National Exposition 2023, IITD, with Rs 2.5 lakhs.

Project Lead, Project ANNOTSAV

Enactus NSUT, Delhi

August 2022 - September 2022

- Deployed a smart irrigation system, benefiting 500+ farmers; secured 1st place at World Races 2022, with Rs 35,000.

Project Lead, Project Aahar

Enactus NSUT, Delhi

February 2022 - August 2022

- Led the Aahar project (F2F model), removing supply middlemen and securing Rs 70 lakhs funding from the Delhi government.

RELEVANT COURSES

† : Outstanding Performance

Foundations DSA, Compiler Design, Software Development Systems OS, Computer Organization, DBMS Miscellaneous Machine Learning†, OOPs, Computer Network