CAP PORTFOLIO - (Data Science Engineer)

# Sudhanshu Ranjan

———————————————————————————————————————1. Homepage (Introduction & Summary)

Hi, I'm Sudhanshu Ranjan — an aspiring Data Science Engineer passionate about solving real-world problems through data, machine learning, and smart innovations.  
Currently pursuing Bachelor of Computer Applications (BCA) with a specialization in Data Science at Lovely Professional University (LPU, 2022–2025).  
I enjoy exploring the intersection of technology and practical solutions through IoT projects, machine learning models, and statistical analysis.

[[Resume](https://github.com/sudhanshuranja/CV)]

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## 2. About Me (Detailed Introduction)

A technology enthusiast driven by curiosity, creativity, and a love for solving problems through data-driven approaches. My academic journey at LPU has helped me build a strong foundation in programming, data analysis, IoT systems, and research.  
I have a deep interest in predictive analytics, hardware programming with Arduino, and building smart systems that contribute to a better world.

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## 3. Skills & Technologies

• Programming Languages: Python, R, C++, C, HTML, CSS, JavaScript

• Data Science/ML Tools: Weka, RStudio, Jupyter, Prolog

• Hardware & IoT: Arduino, Sensors, Microcontrollers

• Database Management: SQL

• Other Tools: Postman, Git

• Core Concepts: Data Structures & Algorithms (DSA), Object-Oriented Programming (OOP), Regression Analysis, Agile Software Engineering

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## 4. Projects

• Electric Vehicle Portal  
 A web platform for users to explore comprehensive information about electric vehicles (EVs) including features, benefits, and sustainability aspects.  
Tech Stack: HTML, CSS  
(Sep 2023 – Nov 2023)

• IPL Data Analysis with R Programming  
 Explored statistical relationships, performed regression analysis, and built predictive models on the IPL dataset using R programming.  
[GitHub Link Here]

• Smart Waste Management System (IoT Project)  
 Developed an Arduino-based smart waste management solution integrating ultrasonic sensors, proximity sensors, raindrop sensors, servo motors, and buzzers.  
[GitHub Link / YouTube Demo if available]

• Simple Linear Regression Analysis in R  
 Conducted detailed linear regression, residual analysis, and model evaluation with real-world datasets in R.  
[GitHub Link Here]

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## 5. Certifications & Courses

• Python Certification — EDX (Aug 2024)

• C Programming — Udemy (Aug 2023)

• C++ and DSA Certification — Love Babbar (Oct 2024)

• HTML and CSS Certification — Love Babbar (Feb 2024)

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## 6. Experience (Internships & Work)

\*Currently seeking internship opportunities to apply academic knowledge in real-world industry settings.\*

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## 7. Competitive Programming & Hackathons

• Finalist in Code A Haunt 2024 coding competition.

• Secured 2nd Position in State Level Athlete (1500 meters race) — Muzaffarpur, Bihar (2022)

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## 8. Open Source Contributions

\*Actively learning and contributing to open-source projects focused on Machine Learning, Data Analysis, and IoT solutions through GitHub.\*

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## 9. Blog & Technical Writing (Optional)

\*Currently planning technical blogs related to data science project case studies and IoT innovations.\*

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## 10. Research Publication/Patent

Research Paper:  
• Title: "The Role of Artificial Intelligence in Healthcare: Reshape Patient Care"  
• Publication: Independent Research Publication  
• Summary: Explored the use of AI and Nanotechnology to transform healthcare sectors globally with a special focus on curing non-curable diseases through Nano robots.

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## 11. Contact Section

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• Phone: +91-9263197473

• LinkedIn: <https://www.linkedin.com/in/sudhanshu-ranjan89/>

• GitHub: <https://github.com/sudhanshuranja>

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## 12. Resume

For a comprehensive overview of my skills and experiences, please [[My Resume](https://github.com/sudhanshuranja/CV)].