

Ritesh Kumar

+91-6206269895 | riteshkumar90359@gmail.com | [LinkedIn](#) | [GitHub](#) | [Portfolio](#)

Career Objective

An aspiring Software Engineer with strong analytical and problem-solving skills, eager to contribute to impactful real-world projects and build a successful career in software development. Committed to securing a challenging role in the IT industry where I can apply my technical expertise and dedication to drive innovation and support the growth of the organization.

Education

Arka Jain University, Jamshedpur

Aug. 2022-May 2026

Bachelor of Technology in Computer Science and Engineering (AI& ML)

CGPA: 8.23

Experience

Backend Intern

May 2024-July 2024

TechMantra Global

Remote

- Gained in-depth understanding of SpringBoot for backend development, proficient in designing, deploying, and managing scalable SpringBoot applications.
- Implemented responsive UI using HTML, CSS, Bootstrap, and JavaScript to enhance user interaction and experience.

Machine Learning Intern

May 2025-July 2025

NIT Jamshedpur

Offline

- Worked on a machine learning project focused on steel surface defect detection using real-world industrial datasets.
- Utilized computer vision techniques such as edge detection, morphological operations, and feature extraction for defect classification.
- Achieved 99.65% accuracy on a 6-class steel surface dataset and 99.72% accuracy on the NEU-DET dataset.

Projects

Age Gender Prediction | Python

GitHub Link

- * Developed a script that predicts age and gender using pre-trained models and the Haarcascade classifier for face detection.
- * The cropped face images are fed into a deep learning model trained to predict both age and gender (male or female).

Food& Recipe API App | JavaScript, HTML, Bootstrap, CSS

GitHub Link

- * Built a web application that allows users to search food recipes based on ingredients, using MealDB API.
- * Developed RESTful APIs and integrated them with databases for enterprise-level solutions.

Steel Surface Defect Detection | Python, CNN, Deep Learning

GitHub Link

- * Developed a Convolutional Neural Network (CNN) model to classify steel surface defects into six categories including crazing, inclusion, patches, pitted_surface, rolled-in_scale, scratches.
- * Achieved 99.65% validation accuracy using an Attention-based Multi-Feature Fusion CNN (AMFF-CNN), outshining standard CNN models.
- * Applied data augmentation and optimized training using batch normalization and dropout to improve model generalization.

Technical Skills

Programming Languages: C/C++, Python, JavaScript, HTML, CSS

Libraries & Tools: NumPy, Pandas, Scikit-learn, Matplotlib, Seaborn, OpenCV

Frameworks: SpringBoot, TensorFlow, Keras, Deep Learning

Developer Tools: VS Code, Git, GitHub, Jupyter Notebook

Databases: MySQL

Cloud & Platforms: Google Cloud Platform (GCP), GitHub Pages

Coursework: Data Structures and Algorithms, Object-Oriented Programming, DBMS, Software Engineering

Interests: Machine Learning, Deep Learning, Web Development

Achievements

Earned a **Certificate in Database Management Systems** through NPTEL.

Successfully organized "Hack Horizon 2K25" — a university-level hackathon that fostered innovation and collaboration among tech enthusiasts.

Certified in Google Cloud Fundamentals & Generative AI — Gained hands-on experience and understanding of cloud infrastructure and generative AI concepts.

Leadership & Extracurricular Activities

Serving as Class Representative (CR) — currently acting as a bridge between faculty and students, ensuring effective communication and academic coordination.

Community Lead at GDG on Campus AJU — actively contributing to the growth of the developer community by organizing tech events, workshops, and peer-learning sessions.

Team Member, Gate Club, Arka Jain University — Participate in club activities and help with events related to GATE preparation.