

PIYUSH KUMAR

piyushcs8340@gmail.com | 8340446586 | Patna, Bihar, India
<https://www.linkedin.com/in/piyush-k-9352b2255/> | <https://github.com/ogpiyush31>

EDUCATION

Birla Institute of Technology, Mesra, Off Campus Patna
B.Tech in Electronics and Communication Engineering

2022 – Present
CGPA: 6.62

EXPERIENCE

PeakStreak Pvt. Ltd.

June 2025 – July 2025

Intern, Software Development

Remote

Developed and deployed a full-stack CRM platform using React.js, Node.js, and MySQL to manage customer interactions and sales pipelines, boosting operational efficiency by 30%.

Engineered over 20 RESTful API endpoints for data manipulation and retrieval, ensuring seamless communication between the front-end and back-end services.

Collaborated in an Agile team of 5 to translate business requirements into technical specifications and production-ready code within 2-week sprints.

GirlScript Summer of Code

May 2024 – July 2024

Open Source Contributor

Remote

Refactored and optimized database queries in a large-scale application, reducing data processing time by 50% and improving response times for over 1,000 active users.

Implemented a Git branching strategy and conducted rigorous code reviews, leading to a 25% reduction in merge conflicts and enhancing overall code quality.

Identified and resolved 15+ critical bugs through systematic debugging, significantly improving application stability and user experience.

TECHNICAL SKILLS

Languages: Python, C++, C, JavaScript, SQL

Web Technologies: React, Node.js, Express.js, HTML5, CSS3, REST APIs

AI/ML: TensorFlow, PyTorch, Scikit-learn, OpenCV, NumPy, Pandas, YOLOv8

Databases: MySQL, SQLite

Developer Tools: Git, GitHub, VS Code, LeetCode, Streamlit, Electron

PROJECTS

Human Detection & Counting System

Python, YOLOv8, OpenCV, Electron, SQLite

Developed a real-time human detection and counting application using the YOLOv8 model, achieving over 95% accuracy in test environments.

Built a responsive, cross-platform desktop GUI using Electron.js for user interaction and data visualization.

Integrated an SQLite database for persistent storage of tracking data, managing over 10,000 data points for historical analysis and reporting.

FitMind: Full-Stack AI Application with Microservice Architecture

React.js, Node.js (Express), Hugging Face Transformers, MySQL

Architected and built a full-stack web application featuring a microservice-oriented backend, where a Node.js orchestrator manages user data and communicates with two dedicated Python (Flask) microservices for AI model inference.

Implemented a complete AI pipeline that performs NLP-based emotion detection with 90% accuracy on user journal entries, then programmatically engineers prompts to generate personalized visual art and conversational responses via external generative AI APIs.

Diabetes Prediction System

Python, Scikit-learn, Streamlit

Trained and evaluated a machine learning model using Scikit-learn to predict diabetes with 88% accuracy on the PIMA Indians Diabetes Dataset.

Performed comprehensive data preprocessing and feature engineering on a dataset of over 700 patient records to enhance model performance.

Deployed the model as an interactive web application using Streamlit, achieving real-time prediction latency of under 500ms.

ACHIEVEMENTS

Solved 250+ problems on LeetCode, demonstrating strong proficiency in Data Structures and Algorithms.

Qualified for the Pre-Regional Mathematical Olympiad (PRMO), a national competition for high-achieving students in mathematics.

Qualified for NTSE Stage 2, acknowledged for strong academic excellence at a national level.