# Harish Saini

Computer Science Student

Dehradun, Uttarakhand – India

#### **EDUCATION**

# University of Petroleum and Energy Studies, Dehradun

B.Tech in Computer Science and Engineering, GPA: 8.02/10 (3rd Semester) 2023–Present

Police DAV Public School

Higher Secondary Certificate (Class XII), Percentage: 92.4% 2023

Police DAV Public School

Secondary School Certificate (Class X), Percentage: 96.2% 2021

### TECHNICAL SKILLS

Languages: C++, Python, Java, TypeScript, JavaScript

Web/Mobile: React, Express.js, Spring Boot, MongoDB, PostgreSQL, MySQL, Redis, Flask Machine Learning: TensorFlow, Pandas, NumPy, Scikit-learn, EDA, Feature Engineering, LSTM Cloud & Tools: Git, Docker, VS Code, Prisma ORM, JWT, Socket.IO, Data Structures & Algorithms

#### **EXPERIENCE**

Backend and Database Engineer • Aaron Softech Private Limited June 2024 – Present Remote Internship

- $\bullet$  Developed microservices architecture using Node.js, Express.js, and Flask, improving system scalability by 40%
- $\bullet$  Implemented polyglot persistence with MongoDB, PostgreSQL, and Redis, enhancing data retrieval speed by 35%
- $\bullet$  Built AI-powered medical report extraction system using TensorFlow and LSTM models with 85% accuracy
- Designed real-time communication features using Socket.IO, reducing response latency by 50%
- Integrated advanced document processing capabilities supporting PDF, DOCX, and Excel formats
- $\bullet$  Implemented JWT-based authentication with role-based access control, strengthening security by 60%

### **PROJECTS**

Botify Forge: AI Chatbot Platform • React, TypeScript, Node.js, PostgreSQL, Redis, Google Gemini AI 2025

- Developed full-stack chatbot platform with React 18 frontend and Node.js backend, serving 1000+concurrent users
- Integrated Google Gemini AI for intelligent conversation processing with 92% response accuracy
- $\bullet$  Implemented PostgreSQL with Prisma ORM and Redis caching, reducing database query time by 45%

- Built WhatsApp Business API integration with real-time message handling using pub/sub architecture
- Achieved 99.5% uptime using Docker containerization and PM2 process management

# Healthcare Analytics Platform • Node.js, Flask, MongoDB, PostgreSQL, TensorFlow 2024

- Built comprehensive healthcare platform processing 10,000+ medical documents with 95% extraction accuracy
- Developed LSTM-based predictive analytics models achieving 88% accuracy in health trend forecasting
- Implemented OCR and computer vision pipeline using PyTesseract and OpenCV for document digitization
- Created real-time dashboard with Socket.IO, enabling instant health monitoring for 500+ patients
- Optimized database queries and caching strategies, improving application performance by 55%

# Water Quality Analysis Pipeline • Python, Pandas, Scikit-learn

2025

- Processed 100k-entry water quality dataset with comprehensive cleaning and feature engineering techniques
- Implemented 5 classification algorithms achieving 89% accuracy in predicting water quality categories
- Developed automated data preprocessing pipeline reducing manual processing time by 70%

# **ACHIEVEMENTS & CERTIFICATIONS**

- Secured Top 10 finish among 300+ teams at National-level Hackathon (2024)
- Machine Learning Certification by Andrew Ng (Coursera)
- Linux Certification (Udemy)