Aalok Kumar Sah

Final Year (B.Tech)
Electronics and Communication Engineering
NIT Rourkela
CGPA: 7.28/10 (till 6th Sem)

Sector-1, NIT Rourkela, Sundargarh
Rourkela, Sector-2, India
Mob.: +91-7644985845
Email: sah633551@gmail.com

Education

2020-2025
B.TECH. IN ECE
NIT Rourkela
CGPA: 7.28/10 *2018-2020*

INTERMEDIATE
MB International School, Kota
Percentage: 74.6% *2004-2018*

HIGH SCHOOL
Bhaubhakta Academy, Janakpur
Percentage: 83%

Online Presence

Github:// **Aalok**
LinkedIn:// **Aalok Sah**
LeetCode:// **Aalok**
Udemy Course:// **AI Course**
Codeforces:// **Aalok**
300+ problems solved, Top 5% in contests

Technical Skills

LANGUAGES
Python, Java, JavaScript, C++

TECHNOLOGIES
Machine Learning, AI, Data Structures, Algorithms

FRAMEWORKS
TensorFlow, PyTorch, React

TOOLS
Git, Docker, Linux, Cloud Platforms (GCP/AWS)

DATABASES
MySQL, MongoDB

Coursework

Data Structures & Algorithms
Machine Learning
Neural Networks
Operating Systems
Computer Networks
Database Management Systems
Cloud Computing

Professional Experience

2024-NOW **R.D Pvt.Ltd** **IT Intern**
- Optimized database queries, improving response times by 30%
- Implemented a ML model for predictive maintenance, reducing downtime by 25%
- Developed a scalable microservices architecture handling 1M+ daily requests
- Collaborated in an Agile team, consistently meeting sprint goals

Python, SQL, Docker, Kubernetes

Key Projects

2023 **Self-Driving Car Simulation** **Machine Learning, Computer Vision**
- Implemented neural networks achieving 95% accuracy in traffic detection
- Engineered algorithms reducing collision risks by 75%
- Utilized TensorFlow for real-time object detection and tracking
- Optimized model performance, reducing inference time by 40%

javascript, html, css

2024 **AI-powered Lunar Lander** **Reinforcement Learning**
- Developed a DQN model achieving 95% successful landings
- Implemented efficient reward shaping for faster convergence
- Reduced training time by 30% through parallelization

Python, PyTorch, OpenAI Gym

2023 **Scalable Movie Recommendation System** **Big Data, ML**
- Developed a system processing 1M+ user ratings for 5K+ movies
- Implemented collaborative filtering using matrix factorization
- Achieved 87% recommendation accuracy on test set
- Optimized for scalability, handling 100K requests/minute

Python, Spark, AWS

Leadership & Extracurricular

2023 **Udan Club** **RC-Subsystem Lead**
- Led a team of 5 in developing ”Fat Boy” RC aircraft, winning at IIT Kanpur
- Implemented autonomous flight controls using Arduino and sensors
- Optimized aerodynamics, improving flight time by 20%

C++, Arduino, CAD

Achievements

2021 **Study in India Scholarship** 50% tuition waiver for top performance among SARC country students

2023 **National Coding Challenge** Ranked 15th among 5000+ participants in algorithmic problem-solving