

Nikhil Sharma

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EXPERIENCE

- **Turing** Remote
Delivery Data Scientist (Full-Time) Jun 2025 – Present
 - **Data Pipeline Development:** Worked on large-scale dataset creation pipelines for training and validation of ML models in education and OCR domains.
 - **Annotation Automation:** Designed structured labeling workflows for SAT question-answer datasets, video-based event labeling, and book page-to-LaTeX/HTML text conversion.
 - **Data Quality and Preprocessing:** Implemented scripts for data cleaning, consistency checks, and semi-automated labeling using Python and JSON-based annotations.
- **Avkalan Labs** Remote
IoT Machine Learning Engineer Intern May 2024 – Aug 2024
 - **Edge AI Deployment:** Deployed ML models on ESP32 using TensorFlow Lite for Microcontrollers and `emlearn` for real-time inference.
 - **Firmware Optimization:** Optimized model pipelines and memory management for embedded systems.

PROJECTS

- **IoT Sensor Data Aggregation and Visualization System**
Personal Project Jan 2025 – Present
 - **Backend & Frontend:** Developed a FastAPI backend and React.js dashboard for real-time visualization of ESP32 sensor data.
 - **Architecture:** Implemented REST APIs and modular sensor integration with scalable multi-node communication.
- **6 DOF Robotic Arm with Computer Vision** Models and Robotics Section, IITR
Team Project Aug 2023 – Jan 2024
 - **Robotics Integration:** Built a 6-DOF robotic arm with YOLOv11-based vision for autonomous object detection and sorting.
 - **Competition Achievement:** Selected as Top 21 Finalist in Flipkart Grid 5.0 Robotics Challenge.

POSITIONS OF RESPONSIBILITY & EXTRACURRICULARS

- **Technical Head** Models and Robotics Section, IIT Roorkee
Student Leadership Role May 2024 – Present
 - **Leadership:** Led a 50+ member team managing 4 Lakh budget for robotics research, prototyping, and competitions.
 - **Initiatives:** Organized national-level hackathons, workshops, and competitions; secured **1st Prize in Ware Wizard (Cognizance, IIT Roorkee)**.
 - **Technical Oversight:** Guided multiple AI/ML and IoT-based robotics projects ensuring innovation and timely delivery.
- **Competitive Programming** Online Judges (LeetCode, GFG)
Jul 2024 – Present
 - **Problem Solving:** Solved 400+ problems across platforms; achieved max rating of 1787 on LeetCode.

TECHNICAL SKILLS

- **Languages:** C++, Python, SQL
- **Frameworks / Tools:** FastAPI, React.js, Docker, Git, Linux
- **Data / ML:** TensorFlow, Pandas, NumPy
- **IoT Platforms:** ESP32, MicroPython

EDUCATION

- **Indian Institute of Technology, Roorkee** Roorkee, India
B.Tech in Civil Engineering; Nov 2021 – May 2025