

DURGESH KUMAR SINGH

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EDUCATION

• Integrated Master of Technology in Computer Science and Engineering

Specialization in Artificial Intelligence and Machine Learning

Cumulative GPA - **9.17**, VIT Bhopal University.

May 2021 – May 2026

• XIIth, Percentage - **74.15**, Nowrosjee Wadia College.

April 2019 – March 2020

• Xth, Percentage - **98**, Kendriya Vidyalaya Southern Command.

April 2017 – March 2018

SKILLS

- **Tech Stack:** Deep Learning, Java, OS, Docker, Nodejs, Mongoose, Expressjs.
- **Certifications:** Machine Learning in Python(Michigan University), NPTEL - Cloud Computing.

WORK EXPERIENCE

Solar-Vision — NRSC-ISRO ([Project-link](#))

August 2024 – October 2024

Roles: Task Lead • Deep Learning Engineer

Hyderabad, India

- Engineered backend for YOLOv8-OBB –based solar panel detection system and Quantization of green energy.
- Enhanced pixel clarity by 30% through high-res image extraction from Google Earth for 5+ Indian states.
- Implemented canny edge detection and masking techniques for improved segmentation (accuracy up to 83%).
- Designed dual-inference pipelines for low/high-res images, outputting predictions in image and JSON formats.

Detecting Sources and Severity of Skin Burn — Omdena ([Certificate-link](#))

June 2023 – June 2024

Roles: • Task Lead • Deep Learning Engineer

Berlin, Germany

- Applied ResNet and MobileNet, fine-grained hypertuning and extraction on 10k+ images, improving by 25%.
- Led 10+ team members, enhancing delivery timelines and overall operational efficiency by 25%.

PROJECTS

Volunteer Management System for NGOs ([Project-link](#))

Roles: • Backend Developer • Backend Integrator

- Built a platform for NGOs with modules for user/event/post management, multilingual support.
- Integrated Razorpay, ChatbaseAI for real-time chatbot and Nodemailer for automated notifications.
- Developed a React.js dashboard with Recharts, improving insights on donations and JWT-secured access.
- Optimized backend using MongoDB indexing and RESTful APIs; deployed with Vercel with secure transaction.

Extreme Weather Forecast for Next 14 Days ([Project-link](#))

Roles: Machine Learning Engineer • Data Scientist • EDA Engineer

- Enhanced LSTM training and data preprocessing on 1M+ data points, reducing parameters by 30%.
- Overhauled training of a 10+ layered neural network using TensorFlow, improving model accuracy by 30%.

CO-CURRICULAR ACTIVITIES

- Led a team of 15+ members as Head of Research in Blockchain Club, increasing member participation by 40%.
- Attained the position of finalist among 50+ teams in 5+ hackathons organized by VIT Bhopal University.
- Achieved recognition as a top 30% coder by solving over 200+ challenging algorithm problems.
- Displayed creative imagination by winning 2+ National level Fine Art competition Govt. of India.