Gunjan Kumar

+91 9106055036 anshuman7520gunjan@gmail.com linkedin.com/in/gunjan-kumar-478632240
github.com/gk269rgb-ai gunjan-anshuman.vercel.app

Professional Summary

Electrical Engineer with strong expertise in circuit analysis, power systems, and MATLAB/Simulink, combined with hands-on experience in AI/ML-based fault classification and technical validation. Experienced in reviewing schematics, validating AI-generated engineering outputs, and contributing domain knowledge to improve model accuracy. Seeking freelance opportunities in AI-first engineering workflows.

Core Competencies

- Circuit Diagrams, Schematics, Signal Flow Analysis
- Power Systems, Fault Diagnosis, Protection
- MATLAB, Simulink, SPICE
- AI Model Validation & Technical Annotation
- Electrical Calculations & Documentation Review

Education

B.Tech in Electrical Engineering Dec 2021 – May 2025
Institute of Infrastructure, Technology, Research and Management (IITRAM), Ahmedabad
CPI: 8.97 — Gold Medalist, Electrical Engineering (2025)

Relevant Experience

AI & Electrical Engineering Research Intern Jan 2025 – May 2025
IITRAM, Ahmedabad
- Designed and simulated power system fault scenarios using MATLAB/Simulink.
- Validated voltage and current waveforms against theoretical power system behavior.
- Reviewed and corrected AI-generated fault classification outputs for accuracy.
- Contributed labeled datasets for training deep learning models in electrical domains.

Freelance Electrical & AI Domain Contributor 2024 – Present
- Reviewed electrical circuit diagrams, schematics, and signal flow representations.
- Verified AI-generated solutions for electrical calculations and system logic.
- Provided structured feedback to improve AI model performance in engineering tasks.

Key Projects

Real-Time Fault Classification in 220kV Power Transmission Line
- Built an end-to-end AI system for multi-class fault detection using CNN, LSTM, and MLP models.
- Generated and synchronized large-scale voltage/current datasets (Va, Vb, Vc, Ia, Ib, Ic).
- Validated AI predictions using power system theory and fault characteristics.

Electrical System Simulation & Analysis
- Performed load flow, short-circuit, and transient analysis in MATLAB.
- Analyzed analog and digital circuits using SPICE-based tools.

Technical Skills

Simulation Tools: MATLAB, Simulink, SPICE
Programming: Python, MATLAB
AI/ML: TensorFlow, Keras, CNN, LSTM
Documentation: Technical review, standards compliance

Availability

Available for remote, freelance, and project based engagements. Flexible working hours.