Nikhil Jadhav

Graduate Electrical Engineer

Pune, Maharashtra | +91-9307460429 | nikhiljadhav1415@gmail.com | linkedin.com/in/nikhil-jadhav

SUMMARY

Electrical Engineering graduate (2026) and certified ETAP specialist focused on power system design and 220/22 kV substation architecture. Bridges the gap between software modeling and field execution through advanced expertise in load flow, short circuit, and arc flash analysis (IEC standards). Complemented by practical exposure to 24x7 PSU maintenance environments, industrial automation, and high-voltage grid reliability. Dedicated to optimizing critical power infrastructure.

CORE COMPETENCIES & SKILLS

- **Power System Design (ETAP):** Load Flow, Short Circuit, Arc Flash, Relay Coordination, SLD Modeling.
- **Drafting & Design:** AutoCAD Electrical, MCC Panel Layouts, Power & Control Circuit Segregation.
- **Standards & Documentation:** IEC Standards, DPR, MPR, IQMS, Technical Report Writing.
- **Substation Equipment:** 220/22 kV Architecture, Power Transformers, SF6 Breakers, Relays, CT/PT.
- **Automation & SCADA:** FactoryTalk View, WinCC, PLC Logic Basics (Allen Bradley, Siemens).

PROFESSIONAL EXPERIENCE

Electromech *June 2026 – Present*
Graduate Engineer Trainee (GET) – Electrical Production *Pune, Maharashtra*

- Facilitate the material issuance process for crane manufacturing projects by rigorously analyzing Bill of Materials (BOM) and technical electrical diagrams.
- Coordinate directly with the materials department to accurately source, inspect, and verify required electrical components, cables, and assemblies for production.
- Perform quality assurance checks on all issued materials to ensure strict compliance with project requirements, schematic specifications, and safety standards.

GAIL (India) Limited *Oct 2025 – March 2026*
Skilled Electrical Technician (SRES Contract Full Time) *Pune, Maharashtra*

- Maintained electrical and instrumentation systems across the plant and Gas Metering Skid Area.
- Operated and monitored Diesel Generator (DG) sets (Manual & AMF) and maintained detailed inspection logs.
- Troubleshot electrical control panels, motor starters, and field instrumentation systems.
- Executed hourly data logging, preventive maintenance, and maintained DPR/MPR/IQMS documentation.

Maharashtra State Electricity Transmission Company Ltd. (MSETCL) *Jan 2025 – Feb 2025*
Intern Trainee – Nanded City Substation (220/22 kV) *Pune, Maharashtra*

- Assisted in the operation of 220/22 kV switchyard equipment including SF6 breakers, isolators, and CT/PTs.

- Performed daily health monitoring of power transformers (OTI/WTI, breathers, cooling systems).
- Monitored real-time grid parameters via SCADA and supported thermography safety inspections.

Central Railway – Pune Division *Jan 2024 – Feb 2024*
Intern Trainee – Electrical Department *Pune, Maharashtra*

- Assisted in electrical maintenance of LHB coaches, ICF coaches, and Power Cars per railway safety standards.
- Inspected critical traction systems, lighting, 110V DC battery banks, 25kW alternators, and inverters.

TECHNICAL PROJECTS

- **220/22 kV Nanded City Substation ETAP Simulation:** Designed a comprehensive Single Line Diagram (SLD) incorporating 220kV main/auxiliary bus architecture. Modeled dual 50 MVA power transformers and 12+ dynamic 22kV outgoing radial feeders. Executed Load Flow, Short Circuit analyses, and configured OCR selective tripping.
- **Real-Time Transformer Condition Monitoring System:** Engineered an IoT prototype analyzing temperature, voltage, and current via sensors with automated relay protection logic to simulate fault tripping.
- **Industrial Automation & MCC Panel Design:** Drafted Motor Control Center layouts in AutoCAD Electrical with strict power/control segregation. Programmed material sorting logic using PLCs and performed I/O testing for starter circuits.

CERTIFICATIONS

- **ETAP Power System Analysis Certification:** 6-Month intensive utility-scale simulation training (Load Flow, Arc Flash, Relay Coordination) by Dr. Krishnav Bhatia, Cosmician Consultants.
- **Industrial Automation & Panel Design:** 5-Month program covering PLC Programming (Allen Bradley, Siemens), SCADA (FactoryTalk View), and hardware panel wiring by Just Engineering, Pune.

EDUCATION

Bachelor of Engineering, Electrical Engineering *June 2026*
Zeal College of Engineering and Research, Pune *6.88 SGPA*

Higher Secondary Certificate (PCM) *March 2021*
Mahatma Gandhi Vidyalaya, Khanpur *68.17%*

Secondary School Certificate *April 2019*
Mahatma Gandhi Vidyalaya, Khanpur *56.80%*