

## Jaivik Kachhia

Email-id: jaivik.kachhia@gmail.com

Linkedin-id: in.linkedin.com/in/jaivik

Contact no.: +91-7875697857

### EDUCATION

Examination	University	Institute	Year	CPI / %
<b>Postgraduate Specialization: ENERGY SYSTEM ENGINEERING</b>				
Post Graduation	IIT BOMBAY	IIT BOMBAY	2013	8.48
<b>Undergraduate Specialization: ELECTRICAL ENGINEERING</b>				
Graduation	Sardar Patel University	Birla Vishvakarma Mahavidyalaya	2010	9.37
Intermediate/+2	G.S.H.S.E.B	C.V. M Higher Secondary school	2006	72.00
Matriculation	G.S.H.S.E.B	V. N. Multipurpose High School	2004	82.43

### PUBLICATION

**Jaivik Kachhia**, R. M. Shereef, S. A. Khaparde, "Operation and Tariff for composite PV-Battery system," *International conference IEEE INDICON - 2013*, Bombay, M.H. Dec. 2013.

### EXPERIENCE

- Three years of international experience in electrical system design for the buildings and infrastructure
- Familiar with international standards such as IESNA, CIBSE, BS standards, NFPA, NEC, DEWA (Dubai Electricity and Water Regulation) regulations, etc.
- Consistently improving and achieved a score of 4.25/5 during employee annual development review.
- Energetic and confident who can easily learn and implement new things to deliver bottom line results and thereby fulfil the expectation of my employer.
- Sound knowledge of electrical design, detailing & MEP coordination, sound interpersonal, organizational, communication and presentation skills.

□ **Electrical Engineer:** Dar Al Handasah - Shair & Partner, Pune (Aug. 2013 - Present)  
I have done,

- Load flow study, Short circuit study, Single line diagram design, Lightning protection system design, Earthing system design, Generator & Transformer sizing and Cable tray sizing
- Load estimate, Design of small power distribution, Motor control center, Indoor and outdoor lighting system & control design,
- MV & LV network schematic for infrastructure projects
- Preparation of engineering documents (Bill of Quantities, Method of measurements and specification).

□ **Lecturer:** A D Patel Institute of Technology, Anand. (Mar. 2011 - Apr. 2011)  
- Laboratory class: Basic Electrical Engg., Electrical Measurement, Power electronics & Microprocessor

### KEY ACADEMIC PROJECTS

□ **Post Graduate Dissertation:**  
*Modelling, Operation and Tariff for composite PV-Battery system* (June 2013)

- I had **modelled** a 50 kWp solar photovoltaic (PV)-Battery system for estimation of PV power output for a site in India.
- I had **found minimum operating cost** of combined thermal generators and PV-Battery plant for each hour by solving cost optimization problem in MATLAB.
- I had **computed** electricity tariff and did financial analysis for PV-Battery system to check the project viability.
- I had done Placement of PV-Battery system for power **loss minimization** in a power distribution network.

□ **B.E. Project:**

*Simulation of Generator Protection Using Numerical Relay 7UM511 and SIMATIC S7-200 PLC* (Apr. 2008)

- I had prepared hardware to implement the generator protection features; DC shunt motor as prime mover and AC synchronous machine as generator
- I had done fault calculation; sizing and placements of circuit breakers and instrument transformers.
- I had studied relay operation and done relay settings calculation
- I had done PLC ladder programming and its interfacing to power circuit to control the operations.

**SOFTWARE SKILLS**

- Programming Language: MATLAB-SIMULINK, L<sup>A</sup>T<sub>E</sub>X, SCILAB, C.
- Application Software: ETAP, PVsyst, DIALux, REVIT-MEP.

**INDUSTRIAL TRAINING**

- JYOTI SWITCHGEARS LIMITED (Jan. 2009)
  - Manufacturing process of contactor, motor starters, instrument transformers, motors and switchgear panels.
- ATLANTA ELECTRICALS LIMITED (Jan. 2008)
  - Transformer manufacturing processes: Winding construction, core assembly, tapping, drying, tank fabrication, oil filling and testing.

**POSITION OF RESPONSIBILITY**

- TEACHING ASSISTANT: ‘*EN 210 LAB CLASS at IIT BOMBAY*’ (2011-2012)
  - Mentored electrical machines laboratory classes, assessed lab journals
- DEPARTMENT EVENT LEADER: ‘*ANNUAL DAY at B V M ENGG. COLLEGE*’ (2009)
  - Volunteered for publishing department’s annual ‘*VISHVAKARMA*’ magazine
- MAINTENANCE IN-CHARGE: ‘*COMPUTER LAB at B V M ENGG. COLLEGE*’ (2008-2010)
  - Computer maintenance, OS installation and software updates

**EXTRA CURRICULAR ACTIVITY**

- I have done Intermediate in Classical Music with first class with specialization in TABLA. (2011)

**HONORS**

- Awarded **bronze medal** in KHO-KHO event during PG Sports held at IIT-Bombay (2012)
- Awarded MERC **government fellowship** for M.Tech in Energy System Engineering at IIT Bombay. (2011)
- Achieved **gold** and **silver** medal for **first rank** in graduation;  $2^{nd}$  in university (2010)
- Awarded Prof. J.C. Panchal project competition merit prize for **best** project in B.E. (2010)

**HOBBIES**

- Playing Tennis, Chess and TABLA