#### P. KARTHICK

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Rajapalayam – 626 117.

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### **Objective**

Seeking new challenging job to converge my professional experience and aptitude for enhancing the growth of the organization coupled with improving my learning curve in a linear fashion towards the overall functional & personality development in order to face the challenging time ahead.

## **Highlights**

- Optimistic Nature
- Good at organizing skills
- Efficient Team Leader
- Fast Learner

## **Professional Experience**

Work experience in the field of Solar: 4 yrs & 7 months

# **Professional Responsibilities**

- Conduct engineering site audits to collect structural, electrical and related site information for use in the design of residential or commercial solar power systems.
- Design or coordinate in design of photovoltaic (PV) system including system components for residential and commercial buildings.
- Preparing technical BoM and technical presentation.
- Examining proper functioning of inverter.
- Provide technical direction or support to installation teams during installation, start-up, testing, system commissioning and performance monitoring.
- Providing Net-metering facility for the site with proper approval from AE/AD of TNEB. Also
  co-coordinating with Chief Electrical Inspectorate for CIEG inspection for solving solar PV
  technical issues.
- Creating checklists for review or inspection of completed solar installation projects.
- Creating electrical single-line diagrams, panel connection diagrams for solar electric systems using computer-aided design (CAD) software.
- Create plans for solar energy system development, monitoring and evaluation activities.
- Developing design specifications and functional requirements for residential, commercial or industrial solar energy systems or components.
- Develop standard operation procedures and quality or safety standards for solar installation work.
- Perform cost reduction analyses for solar systems.
- Review specifications and recommend engineering or manufacturing changes to achieve solar design objectives.
- Test or evaluate photovoltaic (PV) modules or array.

#### **Present Work Place**

Company: Evolve India Solar Pvt. Ltd - Nov, 2015 - Present

**Designation:** Senior Technical Engineer

### Responsibilities

- Configuration of Solar Photovoltaic System for Grid tie and Off Grid system.
- Performing Site Visit and Load Analysis
- Installation of Solar projects from home based to industrial needs ranging between IkW to MW.
- Fixing Errors in the Grid tie Inverters
- R&D To study and scrutinize about the performance and characterization of Solar PV Plant.

## **Previous Work Place**

Company: VATIO Energy India Pvt. Ltd - Nov, 2013 - Oct, 2015

**Designation:** Application Engineer

### Responsibilities

- Configuration of Solar Photovoltaic System for Grid tie and Off Grid system.
- Managing Solar Training Courses for private & government funded candidates such as TATTI Chennai, NISE, TEDA to name a few.
- Installation of Solar projects from home based to industrial needs ranging between IKW to 30KW.
- Office Administration.
- R&D To study and scrutinize about the performance and characterization of Solar PV Plant.

## **Activities Performed in Company Environment**

- Participated in Training program on "Zever Solar Inverter" at Mumbai.
- Prepared Master book on "Solar Photovoltaic" for the Solar Training Course.
- Handled Solar Training classes for more than 26 batches having 50 students in each batch and also trained students for three MNRE sponsored programmes.
- Handled solar training class for National Institute of Solar Energy [NISE] under "SURYAN and KONARK Training Programmes" for Technicians and Installers.
- As a Program Coordinator Conducted one day seminar on **SOLAR Pro**<sub>ver.4.2</sub> at Anna University in association with Laplace systems Japan and Rogress Techno India.

#### Technical skills

- Knowledge of MATLAB, MULTISIM, AUTOCAD & PVSyst
- Familiar with All versions of Microsoft Operating Systems and Linux
- Hard core knowledge on Electrical & Electronics Engineering
- Basic Knowledge of C and C++

<sup>\*\*</sup> Please look over the last page for projects handled so far

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#### Field of Interest

- Power Generation, Transmission and Distribution
- Power Electronics and Drives, Electrical Machines

#### **Co-Curricular Activities**

- Attended one month Solar Training Program organized by TATTI with support from Tamilnadu Energy Development Agency (TEDA).
- Bagged 3<sup>rd</sup> Prize for Academic studies in CMS College of Engineering, Namakkal.
- Published one international conference paper on "A solar panel connected multilevel inverter with SVM using fuzzy logic controller" in IEEE Xplore Digital Library.
- Participated and Presented M.E Project in "Six National Conferences and Two International Conferences".
- Attended several workshops, conferences, seminars and in-plant training conducted by various institutions such as Anna University, Bannari Amman Institute of Technology & SNS College of Engineering.
- Attended the technical training programs and soft skill training program.
- Handled "Analysis of Inverters" classes for M.E (PED) Part time students during Jul. 2012 to Nov. 2012.
- Held key leadership positions with responsibilities of being a contributing person in the departmental activities.

### **Academic Projects**

# M.E Project Work:

Three Phase DC-DC Converter for High Voltage & High Power Applications with Reduced Switch

## **B.E Project Work:**

- PLC Based Multi-way Energy Saver
- Automatic Temperature Control of Water Cooler

### **Workshops Attended**

- Two days Workshop on "Genetic Algorithm and Particle Swarm Optimization" in Anna University, Regional Office, Coimbatore.
- One day Workshop on "Fuzzy Logic and its Applications" in Sri Krishna College of Engineering and Technology, Coimbatore.
- One day Workshop on "8051 Microcontroller: A Practical Approach" in Anna University of Technology, Coimbatore.

#### **Publication**

 J.Jenibha joshi, P.Karthick and R.Sureshkumar, "A solar panel connected multilevel inverter with SVM using fuzzy logic controller", 2013 IEEE International Conference on Energy Efficient Technologies for Sustainability (ICEETS), Nagercoil, India, April 10-12, 2013, pp. 1201 - 1206, (ISBN: 978-1-4673-6149-1).

#### **Education**

M.E Anna University Regional Centre, Coimbatore

Anna University - Chennai Power Electronics and Drives

Dept. of Electrical and Electronics Engineering First Class, CGPA – 7.82 (June 2013)

**B.E** CMS College of Engineering, Namakkal

Anna University - Coimbatore Dept. of Electrical and Electronics Engineering

First Class with Honours, CGPA - 8.64

(April 2011)

**DIPLOMA** Arulmigu Kalasalingam Polytechnic College,

DOTE - Tamilnadu Krishnankoil

Dept. of Electrical and Electronics Engineering

First Class, Percentage - 73.08% (April 2008)

## Personal profile

Name : P. Karthick Father's name : P. Pitchai Passport : J9704649

Date of Birth : 09<sup>th</sup> July 1990

Nationality : Indian

Languages known : English & Tamil (Read/Write)

### Projects handled so far

## \*\* Projects Handled in Evolve India Solar Pvt. Ltd.

- 30kW at YMCA, Purasaiwakkam, Chennai.
- 50 kW at Oragadam, Chennai.
- 500 kW project at M.A.F Clothing, Bangalore.
- 100 kW at Vilva Fruits and its Cold storage plant, Coimbatore.
- 5 kW x 2 No's at MeteximThirumazhisai, Teynampet.
- 10.5 kW at Kilpauk Umayal road, Chennai.
- 200 kW Solar PV car port project at LANSON TOYOTA, Pallikaranai, Chennai.
- 70 kW Roof-top Grid-tie Project at GT Cold storage, Red hills, Chennai.
- I MW Solar PV Plant at Chattrapatti, Tirunelveli District.
- Technical and commissioning support for 400 kW Metallic Roof-top Grid-tie Project at Sakthi Ferro Alloy Sripermbuddur.
- Technical and commissioning support for 30 kW Ground Mounted Grid-tie Project at Police Quarters at Kandigai, chennai.
- 10 kW Metallic sheet Roof-top Grid-tie Project at Symetros, Adayar Chennai.
- 8 kW Roof-top Grid-tie Project at Pallavakkam, Chennai.
- 5 kW Roof-top Grid-tie Project at Metexim Sourcing India PVT LTD, Teynampet Chennai.
- 5 kW Roof-top Grid-tie Project at Metexim Sourcing India PVT LTD, Thirumazhisai Chennai.
- 3 kW & 2KW Roof-top Grid-tie Project at Navaloor, Chennai.
- 2 kW Roof-top Grid-tie Project at Thiruvallur.
- Successfully installed Net-metering for the above mentioned projects
- Done 100 kW Roof-top Grid-tie Project site survey and load study at Mulberry Silks at Bangalore.
- Done site visits for more than 50 sites so far.

### \*Projects Handled in VATIO Energy India Pvt. Ltd.

- Successfully installed & commissioned a **I5 kW Solar Grid Tied System** at SISHYA School, Chennai.
- Successfully installed Solar PV Power System for 1000 houses under the Government of Tamil Nadu scheme in Kancheepuram District.
- Successfully installed 10 Numbers of 1kW Grid Tied System, under Tamilnadu Chief Minister's Capital Incentive Scheme Subsidy sponsored by the State government.
- Successfully installed **Dual Axis Solar Tracking System** at SRM University, Chennai.
- Successfully installed **20 Nos. of Solar Street Light** of Wipro Lighting Chennai.
- Successfully installed a IKW<sub>p</sub> Solar PV Shadow Analysis Test Project System at Kalasalingam University – Srivilliputhur.
- Successfully installed **Solar Water Heating System** (500LPD) in Selvavani Marriage Hall
- Successfully installed Solar Water Heating System (100LPD) in Kilpauk, Chennai