

OBJECTIVE[Linkedin.com/AminAmini](https://www.linkedin.com/in/AminAmini)

Seeking an internship position in Electrical/Mechanical Engineering with emphasize on energy efficiency, REs and Building System Automation.

EDUCATION**Purdue School of Engineer and Technology, Indianapolis**

Expected Graduation: May 2017

Master of Science, Mechanical Engineering

- Relevant Courses: Energy Management Principles, Industrial Energy Audit

Purdue School of Engineer and Technology, Indianapolis

Graduated Dec 2015

Master of Science, Electrical Engineering 3.54

- Relevant Courses: Modern Control, Energy Conversion, Optimization Method for Systems and Controls

Power and Water University of Technology, Tehran, Iran

Graduated June 2013

Bachelor of Science, Electrical Engineering - Transmission and Distribution Networks 15.15/20

- Relevant Courses: Power Networks Operation & Dispatching, HV Substation Design, Transmission Lines, Power Systems

CERTIFICATIONS/ AWARDS**Certifications**

- LEED Green Associate, State of Indiana-11007570, January 2016
- Engineer-in-Training (EIT) Certification, State of Michigan, July 2015
- Commercial Building Energy Audits, ASHRAE, Winter Conf. 2015

Awards

- Graduate Assistant Scholarship 2015-16
- Block Grant Award for Spring 2014/ Fall 2014/ Spring 2015
- Dean's Academic Success Scholarship for Spring 2014

WORK EXPERIENCE**Industrial Assessment Center, Sponsored by US Department of Energy, IUPUI**

Jan 2015 - Present

- Conduct multiple ASHRAE Level I-II energy audits for small and medium sized manufacturing facilities
- Measure and verify plant energy usage patterns through data acquisition and utility bills
- Design, model and analyse mechanical and electrical systems for energy saving solutions including compensation by capacitor bank, up-grade lighting systems, VFD, peak shaving, load shedding, CHP and HVAC systems
- Identify and provide the savings and cost analysis of all practical measures that meet the owner's constraints
- Write official reports detailing energy saving measurements and ROI calculations iupui.edu/iac

Superfrost Co. as an Electrical Installation Consultant, Tehran, Iran (www.superfrost.com)

2010-2012

- Giving advice to industrial/private customers on their energy consumption. Using AutoCAD to draw electrical wiring layouts

High Voltage Substation (230/63/20 kV) as an Electrical Engineer Intern, Tehran, Iran

June 2010 - Sept 2010

- Hands-on experience in HV breakers, CTs, PTs and distribution transformers and being in different emergency missions

PROJECTS**Wireless Energy Monitoring System (WEMS), Sponsored by DOE**

May 2015 - Current

This system allows us to monitor energy consumption & equipment performance real-time and remotely by hooking up wireless sensors. An embedded system is employed for acquiring wireless sensors data, and then recommending some actions. I was in charge for the whole project.

Leak Detection for Various Gases, Sponsored by DOE

Jan 2015 - Current

Developing an algorithms relating leak data from various gasses to ultrasonic data. Leak data will be recorded through several hole sizes for each gas as a function of pressure at calculated volume and ambient temperature. It addresses the concern which we face in every audit.

Modelling for Air Handling Unit for Wireless Monitoring, Sponsored by EPA

April 2015

People, Prosperity, and the Planet was a unique college competition for designing solutions for a sustainable future. Wireless monitoring would allow us to collect CO₂, humidity, temperature and power usage for AH units to come up with energy saving methods by using our model.

Peak Shaving by Forecasting Demand Usage Pattern

Feb 2015

Proposing an innovative data analysis algorithm, called Weighted Incremental, to find and forecast the demand usage pattern based on historical data. This recommendation ended up by 30,000 kWh and 720 kW saving per year with 12.3 months payback period. for one of our costumers.

PUBLICATIONS**Journal Papers**

- K. Nagasaka, **A. Amini**, M. Vaez Momeni "WinDam: A Novel Airborne Wind Turbine" in *International Conference on Future Environment and Energy (ICFEE), 2016, Pattaya, Thailand.*
- A. Amini**, H.E. Shoori J., M. Kamooona, "Hidden Wind Farms Potential For Residential Households Having Roof-mounted Wind Arrester" in *Renewable Energy Research and Applications (ICRERA), 2014 International Conference on, vol., no., pp.891-896, Milwaukee, US.*

Book Publication

- A. Amini**, P. Bizet, I. Amini, A. Houbakht, D Zarnegar, S. Sedghi, "Sky Domes", published in "Regenerative Infrastructure Freshkills Park NYC, Land Art Generator Initiative", ISBN-13: 978-3791352862.

TECHNICAL & COMPUTER SKILLS

- TECH SKILLS** Design electric layouts by AutoCAD, Substation Design and Planning by AutoCAD 3D, FLUKE Power Logger, FLIR Infrared camera, Transmission Line tower climbing, Ultrasonic Gun
- ENG. SOFTWARE** EnergyPlus, TRACE, AutoCAD, MATLAB, Power World Simulator, ANSYS, SOLID WORKS, Word, Excel, Power Point
- LANGUAGE SKILL** English, Arabic, Mother tongue: Farsi

*References are available