Summary:

An Electrical Engineer who has worked in a number of individual and team oriented projects in the areas of power system analy   sis, operations, controls, stability, dynamics, renewable energy systems ; and looking for a full time position   or an internship to work, on an innovative project, where I can put my skills into use. I am willing to relocate.

Education:

- May 2013 — **Master of Science in Engineering** — *Arizona State University, Tempe AZ, USA*
  Electrical Engineering (Power and Energy Systems)
  GPA 3.39/4.00
- May 2011 — **Bachelor of Engineering** (with Distinction) — *Anna University of Technology, Trichy, India*
  Electrical and Electronics Engineering

Technical Skills:

- Matlab, Simulink
- MathCAD
- PSLF
- PSS/E
- DSA Tools
- PowerWorld Simulator
- PSpice
- C, C++
- MS Office
- AutoCAD

Relevant Coursework:

Power System Analysis	Power System Stability & Dynamics	Solar Energy
Power Transmission & Distribution	Power Plant Control & Monitoring	Feedback Systems
Power Engineering Operations/Planning	Electric Energy Markets	Strategic Technologic Planning

Work Experience:

- Aug 2012 to Present — *Teaching Assistant* for 'Energy Systems and Power Electronics Lab' at Arizona State University
- Aug 2012 to Present — *Engineering Tutor* at Arizona State University
- Winter 2010 — *Inplant Trainee* at Neyveli Lignite Corporation, India (Primary power producer of South India)

Publications:

Optimization and Sizing of a Grid-Connected Hybrid PV-Wind Energy System (Senior Year Researchwork)
International Journal of Engineering Sciences and Technology (IJEST), Volume 3, Issue 5, PP: 4296-4323

- Used linear programming to study the injection of PV and wind energies into the existing grid at a remote area in Montana, ta king a balance between cost and the carbon-di-oxide generation

Class Projects:

- Power Flow studies and Stability Analysis using PowerWorld Simulator
  Built a 10 bus system using PowerWorld Simulator, solved for the power flow to converge using Newton Raphson algorithm and performed transient stability analysis to find the critical clearing time for a 3-phase fault
- Study of transmission adequacy by Arizona Transmission Expansion Co. for adding PV resourses using Matlab
  Performed DC load flow studies for a 6 -bus system using Matlab and maximized the PV injection at two different places with the existing transmission lines
- Transient Stability Analysis using (a) PSLF (b) Matlab
  Performed stability analysis of a 4 -machine system to find the critical clearing time for differ ent types of faults using PSLF and did the same task by writing a code in Matlab
- Study of Dynamics of a papermill (a steam plant connected to a small hydro unit) using Matlab
  Simulated the starting of a large chipper motor, controlled by   a papermill which has a steam and a hydro unit and plotted their responses using Matlab
- Dynamics study of a steel plant due to different types faults using PSLF and improvement of system performance
  Analyzed the different kinds of faults which caused the steel plant to shut   down several times and fixed them by adding appropriate amount of series reactors in the system
- Dynamics study for the effect of different types of exciters in the system and improved the stability issues using a PSS
  Performed the small signal and transient stability analysis for a four machine system and studied the effect of exciters on them and installed a PSS at the appropriate location to resolve the stability issues
- Construction of transmission line between two places in India
  Studied the feasibility of building a transmission line from Neyveli to Pugalur   (India) and calculated the various ratings and parameters required
- Optimization of a silicon solar cell production line by improving throughput & cell efficiency (Sun Power Co.)
  Managed a virtual silicon solar cell production line using a virtual manufacturing execution   system (VMES) software to reduce mechanical & electrical yield losses, increase throughput of the wafers on the line and optimize the cell efficiency
- Design and cost analysis of a standalone PV water pumping system
  Designed a standalone PV water pumping system to irrigate a farm land in Pakistan and compared the cost with the existing diesel generators
- Created a business plan to launch an online gaming website
  Critically analyzed every aspect of launching an online gaming website and prepared a business plan

(References available upon request)