Siyam Saha

-Email me on Indeed: http://www.indeed.com/r/Siyam-Saha/f6d3f51fc5e884eb

ELECTRICAL ENGINEER
EXCEL AT POWER ELECTRONICS, POWER SYSTEM, AND RENEWABLE ENERGY
Experienced Electrical Engineer and power electronics enthusiast. Highly capable in research and designing innovative power electronics systems for RE conversion, EV's, and power quality that meet the need of the growing industry and grid standards. Three years of experience in power system operation & planning, RE, and PM. Led
Project Management Life Cycle from strategic planning to filing closing documentation. History of successful cross- functional collaboration and leadership to ensure reliable power system operation and efficient expansion.

Work Experience

Electrical Engineer

Da Afghanistan Breshna Sherkat (DABS)
June 2016 to August 2019

■ Monitored power system through SCADA to ensure reliable power system operation; developed and established contingency plans that reduced power cuts and prevented capital loss.
■ Actively participated in design, planning, and operation with cross-functional teams to assess ongoing projects and proposed new projects to achieve the expansion of the power system effectively and within the budget.
■ Heavily contributed to the development of an efficient power generation and purchasing planning by implementing more accurate load forecasting methods.
■ Provided technical oversight and engineering support on the construction of new transmission lines and distribution systems and assessed their effectiveness on power system operation.
■ Acquired in-depth knowledge of grid standards and regulations through operating the power system.

Re Engineer and Project Manager

European Technology Company (ETC)
January 2017 to May 2018

■ Performed detailed design of Solar Power System and Solar Water Pump System; recommended suitable renewable energy solutions to address client's need.
■ Successfully managed a project sponsored by World Bank to deliver and distribute compact solar packages to underserved communities all over the country.
■ Established and maintained relationship with stakeholders, clients, and vendors to clarify technical specifications and requirements; maintained comprehensive project documentation.
■ Monitored project performance, analyzed progress against set goals and milestones, suggested solutions to stay on track.
■ Generated and analyzed project progress, managed daily operations coordinating work with the internal departments, subcontractors, site team, and the customer from start to finish.

Education

Master of Engineering in Eng

Arizona State University

August 2019 to May 2021

Bachelor of Science in Electrical and Electronics Engineering

Kabul University

March 2012 to December 2015

Skills

- Performed detailed design of a 2.5KW single-phase grid-tied PV inverter while using a more effective technique of Maximum Power Point Tracking (MPPT) called Incremental Conductance (IC).
- Utilized in depth knowledge of Power Electronics to develop new converter topologies with adjustable Power Factor (PF) to comply with the latest grid-codes for Distributed Generation integration.
- Successfully developed a 48V Power Supply from three-phase grid for a sensitive 5KW control apparatus admitting only 50mV ripple while achieving unity PF and <3% THD for supply currents to comply with IEEE standards.
- Studied harmonics of non-linear loads and proposed power electronics related solutions in form of Active Filters to reduce THD and attenuate harmonics from supply currents.
- Analyzed the impacts of DFIG and full-converter Wind Turbines on stability of IEEE’s 2-area power system to better understand and mitigate the challenges facing large Wind Systems integration into the grid.
- Performed testing and prepared reports on steady-state and dynamic responses of converters through extensive simulations in PLECS and Simulink software.
- Successfully completed a feasibility steady project for distributed rooftop PV System installation and assessed its impacts on sustainability and fuel saving from Diesel Generators. PLECS, Simulink, Python, MATLAB, PVsyst, PSLF, PSS/E, AMPL, MS Office (Word, Excel, PowerPoint), AutoCAD
- DC to DC Converters
- RE Inverters
- Power Supplies
- Traction Inverters
- EV’s
- Active Filters
- Harmonic Studies
- Transmission & Distribution
- Converters Testing
- Machine Learning
- Simulation
- Stability Studies
- Feasibility Studies
- Project Management
- Stakeholder Relations
- Quality Control
- Technical Oversight Vendor

- Workplace Safety