

Education

Drexel University: Master's and Bachelor's in Mechanical Engineering
Concentrations: Fluid and Thermal Science, Manufacturing
Minor: Business Administration

Philadelphia, PA
CGPA: 3.78; Magna Cum Laude

Professional Experience

Radial Power LLC. (C&I Solar, BESS and EV Charger Developer and Owner)

Manhattan, NY

Director of Design and Development Engineering

June 2023- Present

Senior Solar Design Engineer

December 2022 – June 2023

- Oversee the creation of preliminary, 30%, 60%, IFP and IFC drawings for commercial and industrial (C&I) rooftop and ground mount solar projects including but not limited to civil, structural, electrical and DAS design for projects located in NYISO, CAISO, ERCOT, ISO-NE, Southeast and PJM.
- Review design drawings such as one-line and three-line diagrams, electrical layouts, equipment's layouts, AC/DC schematics, AC/DC cable schedules and conduit details to ensure best Levelized Cost of Energy (LCOE).
- Review and conduct engineering calculations for solar power plants, including PV string sizing, DC and AC conductor and conduit sizing, voltage drops, overcurrent protecting sizing.
- Review and perform energy generation modelling for solar projects using Pvsyst, Helioscope, Plant Predict and other software tools to ensure optimal performance of solar projects and keep up to date with relevant weather data sources, system loss factors and P50/P90 analysis.
- Collaborate on creation of Approved Vendors list, and review & selection of solar modules, inverters, MV equipment's and balance of systems for each individual project.
- Implement and maintain familiarity with engineering codes and regulations as they apply to Solar PV and BESS, including but not limited to NEC, NFPA1, NFPA 855, IBC, ANSI, ASME, AWI and local codes and standards.
- Conduct technical due diligence for M&A opportunity by assessing accuracy of third-party provided production estimates, site plans, product documentation and meteorological data sets.
- Provide technical support to the development, procurement, construction team and O&M team.
- Conduct site visit to support the project development, design and assess electrical interconnection.
- Work with Independent Engineers to support preparation and closing out of technical aspects of the IE bankable report.
- Establish guidelines, SOP's, Checklist to streamline and scale the through output of the engineering team.
- Work with Contracts manager to review the Work Orders: LNTP & NTP scope of work, project budget, schedule, and technical aspects of the contract.

GameChange Solar LLC. (Utility and C&I Equipment Vendor- Racking and BOS)

Norwalk, CT

Assistant Director of Engineering

June 2020 – December 2022

- Review the structural drawings and calculation packages for initial design and IFC level design and provide guidance and feedback to the engineers on any potential issues.
- Track project design schedule and co-ordinate with operation team to ensure expectations are set correctly and deadlines are met.

- Lead internal and external engineering review meetings and support operation teams on client meetings. Serve as primary point of contact for customers engineering related queries like project design, design changes, RFI, NCR.
- Co-ordinate with engineering consultant and third-party engineering firms for special studies, calculations, drawings packages, professional stamps, and value engineering.
- Review and improve internal standards, best practices, and procedures on a regular basis by drafting documents like QC checklist, 8D and FMEA.
- Perform quality reviews (FAI) on sample parts and production parts coming from internal vendors and vendors from China.
- Mentor incoming engineering hires to get them up to the point where they can work independently and continuously serve as resource for the engineering team. Assist with the engineering hire process by conducting the skill assessment tasks.

GameChange Solar LLC. (Utility and C&I Equipment Vendor- Racking and BOS)

Manhattan, NY

Engineering Project Manager

July 2018 – June 2020

Project Engineer

October 2016 – July 2018

- Provide technical reviews of specifications, drawings, contracts, addendums, and other construction documents to ensure constructability and compliance with building codes, safety, structural and environmental standards.
- Draft construction documents; plans, assembly drawings, and detail; for ground and roof mounted solar racking systems.
- Perform structural calculations for company products in accordance with relevant code and design standards including but not limited to IBC, AISC, Eurocode. Designed steel pile foundations based on Geotechnical and pull test results.
- Visit construction site to ensure the construction work is performed based on the contract drawings and specifications. Manage RFI and NCR and offer solutions to construction team.
- Work closely with installation teams to improve means and methods, install safety, documentation, and quality.
- Maintain intimate familiarity with best design practices and new products used in industry through continuous review of manuals and improved design techniques.
- Manage daily tasks needed to keep the projects focused and on schedule. Evaluated inbound documentation to identify potential hurdles to successful project completion.
- Collaborate with multi-disciplinary engineering teams and work with vendors and contractors.

Technical Skills

CAD: AutoCAD, SolidWorks, Creo, ANSYS, ABAQUS, Inventor

Solar Software: Pvsyst, SAM, Helioscope, Aurora Solar, Plant Predict, DNV-Solar Resource Farmer, PVWatts

License/ Certifications

OSHA 30-Hour Construction (DOL # 26-607422270)

Six Sigma Yellow Belt (Technical University of Munich)