

USAMA JAVED

SOLAR PV PROJECT ENGINEER, PLANNING AND SITE DELIVERY

Dublin, Ireland • +353 85 773 5337 • usamajaved1305@gmail.com

PROFILE

Mechatronics engineer with three and a half years delivering solar PV projects from site survey through installation, commissioning and client handover, across on-grid, hybrid and off-grid systems. Portfolio of roughly 70 percent residential and 30 percent commercial work, from small domestic systems to commercial rooftops. Experienced leading installation crews on live sites and equally strong on the planning side: building project programmes, controlling bills of material and budgets, tracking milestones against baseline and reporting progress to stakeholders. Currently completing an MSc in Business Analytics at Dublin Business School, applying Power BI, SQL and Python to project reporting and forecasting. Dublin based.

CAREER HIGHLIGHTS

- › Delivered over 100 residential and commercial solar PV installations, ranging from 5 kWp domestic systems to a 115 kWp commercial rooftop.
- › Managed 36 projects totalling 790 kWp in a single year at 85 to 90 percent on-time completion, against supplier stock shortages and labour constraints.
- › Supervised installation crews totalling up to 40 people across five concurrent sites.

CORE COMPETENCIES

- › **Site delivery:** installation crew leadership, daily work allocation, activity sequencing, workmanship inspection, snag close out, client handover.
- › **Technical review:** installation drawings, single line diagrams, layouts, load calculations, system sizing; on-grid, hybrid and off-grid PV across rooftop, ground mount and carport.
- › **Planning and controls:** work breakdown structure, baselines, milestone tracking, critical path awareness, look ahead programmes, variance reporting, recovery planning.
- › **Cost and procurement:** budget control, bill of materials, material call off planning, long lead item tracking.
- › **Commissioning:** testing, fault finding, as built documentation, post installation support.
- › **Site HSE:** RAMS awareness, toolbox talks, PPE enforcement, working at height and safe systems of work.
- › **Scheduling and data:** Primavera P6, MS Project, advanced MS Excel, Power BI, SQL, Python.
- › **Design software:** Helioscope, OpenSolar, SketchUp, AutoCAD, SolidWorks.

EXPERIENCE

Project Manager | Solar Neon Engineering Pvt Ltd

May 2025 to Mar 2026

- › Managed delivery of 36 residential and commercial solar PV projects totalling 790 kWp, covering site assessment, design validation, installation supervision, commissioning and client handover.
- › Led three technical engineers and installation crews totalling up to 40 people across five concurrent sites, allocating daily works and sequencing activities to hold projects to programme.
- › Held 85 to 90 percent on-time completion, tracing slippage to material availability and labour shortages and re-sequencing works to contain the impact on downstream activities.
- › Built and maintained project programmes and cost baselines, tracked actual progress against plan and reported status to senior management.
- › Validated roof structure, shading, load calculations and system sizing before mobilisation, cutting on-site design changes and rework.
- › Acted as site escalation point through installation and commissioning, resolving interface conflicts between mechanical mounting, DC string routing and AC connection works.

Senior Project Engineer | Islamabad Solar House Pvt Ltd

Feb 2023 to Apr 2025

- › Ran the full project lifecycle on 59 residential and commercial PV installations ranging from 5 kWp to 115 kWp: site assessment, system design, installation coordination, commissioning and aftercare.
- › Delivered 85 to 95 percent of projects within the agreed programme while running two concurrent projects at a time.
- › Managed a two month programme delay caused by an inverter supply shortage, re-planning installation dates and re-sequencing site works to limit knock-on effects for the client.

- › Reviewed and approved installation drawings, single line diagrams and technical specifications for on-grid, hybrid and off-grid systems.
- › Maintained bills of material and material call off schedules with procurement, tracking milestones and flagging slippage early to protect the installation programme.
- › Carried out commissioning, testing and fault finding, closed out snag lists and issued as built documentation to clients.

Project Engineer | Safeway Renewable Energy Pvt Ltd

Sep 2022 to Jan 2023

- › Supported execution of seven residential and commercial solar projects, developing scope and duration assumptions from installation drawings, load calculations and technical specifications.
- › Conducted 12 site inspections to monitor progress, verify workmanship against specification and enforce site safety standards.
- › Managed interfaces and dependencies between MEP, solar PV and installation teams to protect completion dates.

Mechatronics Engineer, Intern | National Institute of Electronics

Jul 2022 to Aug 2022

- › PIC microcontroller programming and sensor and hardware interfacing for automation and embedded system applications.
- › Built and tested a temperature monitoring system with real time data capture and system validation.

SELECTED PROJECTS

- › **115 kWp commercial rooftop:** largest system worked. The roof runs south east rather than south, so facing the array due south would fit only 163 modules. 198 modules at 114.84 kWp in eleven strings of eighteen. Set the array out along the building at 146 degrees instead, sized the strings at 1,012 V against an 1,100 V inverter limit on the coldest morning, and settled the fusing from the inverter's tracker layout, so no string fuses are needed.
- › **Solar UPS system:** PV array, charge controller and 12V DC storage with inverter output, delivering uninterrupted backup power for household electrical loads.
- › **Single and dual axis solar trackers:** Arduino, LDR and servo based alignment, plus a GPS and RTC variant computing solar position mathematically for light independent operation.

EDUCATION

MSc Business Analytics | Dublin Business School, Ireland

2026 to Present

Coursework: data modelling and visualisation in Power BI, SQL and Python analytics, forecasting, project and operations decision analysis.

BE Mechatronics Engineering | Air University, Islamabad

2018 to 2022

Coursework: electric circuits analysis, electronic devices and circuits, control systems, instrumentation and measurement, manufacturing automation, engineering statics, mechanics of materials, fundamentals of thermal sciences, engineering drawing and solid modelling, modelling and simulation, engineering economics.

CERTIFICATIONS

- › **Foundations of Project Management:** Google Career Certificate on Coursera, Sep 2026. Scheduling, budgeting, risk and stakeholder management.
- › **Photovoltaic Systems:** Technical University of Denmark (DTU) on Coursera, Sep 2024.
- › **Solar Energy and Electrical System Design:** University at Buffalo on Coursera, Sep 2024.
- › **Solar Energy Basics:** State University of New York (SUNY) on Coursera, Sep 2024.
- › **Introduction to Solar PV Design, Installation and Code:** HeatSpring, taught by Sean White, approved for NABCEP hours, Jul 2024.
- › **Know Your Code, Solar Roof Mounting:** IronRidge, Mar 2024.
- › **Solar 101, Residential Sales:** SolarEdge Technologies, Sep 2024.

ADDITIONAL

- › **Languages:** English (professional), Urdu (native), Punjabi (fluent).
- › **Activities:** Student member of ASME, 2018 to 2019; competitor in inter university robotics competitions; member of the Air University Cultural Society.