

Hamza Pervaiz Alam

[Email](#) | [LinkedIn](#) | [Portfolio website](#)

Senior Mechanical Engineer with 10+ years experience.
Internationally accomplished with a penchant for
creativity, organization and innovation.

Experience

2018 - Present

Mechanical Design Engineer | Various clients | Bahrain, USA

- Delivering end-to-end working prototype models as proof of concepts for physical hardware in the consumer product industry
- Working on mechanical design including DFM, DFA, DFAM
- Focusing on detailed design research, brainstorming, iterative solutioning, prototyping and testing: FEA, 3D printing
- Drafting 2D / 3D CAD models, visualizations, animations and renders
- Develop, design, build, assemble and deliver working prototypes
- Writing and illustrating patent documentation

2024

Operations Director | WaveOn Health | USA

- Re-organized company structure and set scope for each department
- Managed operational strategies to align team with organizational goals, improving client outcomes and operational efficiency
- Supervised cross-departmental collaboration, facilitating effective communication between sales, marketing, and development teams
- Assessed and addressed skill gaps within teams, developing tailored mentoring and training plans
- Established metrics to track performance, enhancing reporting and accountability across all levels
- Focused on strategic planning, process optimization, team leadership and risk management
- Managed resources, key partners, vendors and budgets
- Elevated quality assurance and compliance that met industry standards and regulations

2019 - 2023

Project Engineer | Hidd Power Company (ENGIE) | Bahrain

- Regularly coordinated with diverse teams to identify and resolve project bottlenecks
- Followed operational excellence and compliance: ASME, NFPA, ISO and National Fire and Building Regulations and Codes
- Risk management planning and project management: overseeing projects relating to maintenance, optimization and recovery of electrical, mechanical and instrumentation and control services
- Worked on Root Cause Analysis (RCA), project optimization and proactively monitored data of plant equipment
- Developed two thermal models to aid plant efficiency resulting in savings of \$75,000 USD / year
- Facilitated water crisis shutdown by coordinating remediation activities while establishing prevention strategies
- Mediated between parties (contractors, insurance, OEM) in a gas turbine incident delivering recovery efforts, investigations and reporting
- Established digital technical documentation libraries that were originally on paper: SOPs, manuals and procedures
- Major revenue and equipment loss mitigation: pioneered outage risk management framework during COVID-19 to help logistics management of equipment, minimizing risk on plant availability

2016 - 2019

Technical Sales & Project Engineer | NASS Commercial | Bahrain, Kuwait

- Generated over \$3 million USD in revenue within 2 years with new and existing pipelines
- Oversaw multiple project sites for various clients
- Enhanced client relationship with project re-design for air station and piping development
- Analyzed current product mixes to obtain new segments by conducting research with clients
- Worked on sales prospecting, client / customer relationship management and retention
- Restored key account management for over 30+ clients and served as liaison with subcontractors
- Created CAD design of air station and piping networks, as per CAGI standards

Education

2020 - 2022

Master of Science (MSc) Engineering Management (honors) | University of Hull | United Kingdom

- Topics and modules: Management of People & Organizations, Engineering & Design for Quality & Business Improvement, Logistics & Supply Chain Management, Project & Financial Management
- Thesis: Circular Business Models for Power and Water Plants in the Middle East

2011 - 2015

Bachelor of Science (BSc) Mechanical Engineering | University of Bahrain | Bahrain

- Topics and modules: Mechanical Design, Fluid Dynamics, Heat Transfer, Statics & Dynamics, Instrumentation & Control, Power & Desalination, Material Science, Manufacturing Technologies, Operations Management, Turbomachinery, Vehicle Design
- Thesis: Solar Absorption Air Conditioning; won Best Project Award
- Accreditation: WES, ABET

Certificates

- In Progress - PENG
- 2024 - Standard First Aid - CPR C - AED
- 2024 - SolidWorks CSWA
- 2023 - NEBOSH International General Certificate
- 2022 - Enhancing Combined Cycle Power Plant Performance
- 2022 - Highfield International Fire Safety Award
- 2022 - IELTS 8.5
- 2021 - Autodesk AutoCAD Certified Professional
- 2020 - Aptech MS Excel Intermediate
- 2019 - ECITB International Health and Safety Passport
- 2019 - Aptech MS Project Intermediate
- 2017 - KAESER Basic I - Principles of Compressed Air Technology

Skills

Project management	10+ years managing large, complex projects for government and commercial clients. Develop detailed plans, schedules, and budgets for medium-risk projects using advanced project management tools.
Innovative design	Create and prototype designs using CAD tools like SolidWorks and AutoCAD
Leader	Build and manage project teams, ensuring clear communication and collaboration
Risk management	Identify risks, develop strategies, and address issues to minimize disruptions
Effective negotiator	Manage changes to project scope, schedule, and budget; prepare change requests
Performance monitoring	Use of Earned Value Management to track schedule and budget; prepare progress reports
Stakeholder management	Maintain constructive relationships with internal and external stakeholders
Regulated environment	Deliver projects compliant with ISO and ASME standards
Safety knowledge	Ensure compliance with health and safety practices in sensitive workplaces
Strong communicator	Excellent written and verbal skills; facilitate meetings and document information efficiently

Software

Enterprise Management

SAP, IBM Maximo, Hubspot, ClickUp, Stripe, Carta

Office

MS-Office: Word, Excel, Power Point, Visio, Project. Google Docs.

Simulation & CAD+

Creo, Inventor, Revit, Fusion 360, SolidWorks, Sketchup, MatLab, Simulink, Photoshop, SketchBook Pro, Excel VBA, C++, 3D Home Architect