

# Hamza Pervaiz Alam

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

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

## Experience

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### 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

### 2023 - 2024

Mechanical Design Engineer | Additive Engineering Inc. | USA

- Worked on mechanical design and prototyping
- Executed injection mold design
- Preparation of refined functional prototype for presentation to potential licensees
- Overall goal of making the product appealing for licensing
- Generated CAD modelling and 2D / 3D drafting

### 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

Mechanical Design Engineer, Project Engineer, Technical Sales | 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

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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

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- In Progress - PENG
- 2024 - SolidWorks CSWA
- 2023 - NEBOSH International General Certificate
- 2022 - Enhancing Combined Cycle Power Plant Performance
- 2022 - Highfield International Fire Safety Award
- 2021 - Autodesk AutoCAD Certified Professional
- 2019 - Aptech MS Project Intermediate
- 2017 - KAESER Basic I - Principles of Compressed Air Technology

# Skills

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

# Software

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## 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