

# Yasser Al-Malki

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## Education

Carnegie Mellon University	Pittsburgh, Pennsylvania
Master of Science in Mechanical Engineering, QPA: 4.00/4.00	May 2026
University of Tabuk	Tabuk, Saudi Arabia
Bachelor of Science in Mechanical Engineering, GPA: 4.38/5.00	May 2019

## Skills

**Core Competencies:** Programming, FEA, GD&T, CAD, product design, CMM

**Software:** Ansys, NVIDIA Isaac, Catia, SolidWorks, IFS ERP System

**Programming Languages:** Python, MatLab

## Work Experience

<b>Carnegie Mellon University - Computational Engineering &amp; Robotics Laboratory</b>	Pittsburgh, Pennsylvania
Graduate Research Assistant	August 2024 – Present

- Developed advanced AI-driven models by leveraging machine learning, deep learning, and data analytics to tackle complex engineering challenges, translating intricate data into actionable strategies that optimize predictive accuracy, enhance decision-making, and drive competitive advantage in dynamic market environments.
- Leveraged Carnegie Mellon University's multidisciplinary ecosystem to integrate mechanical engineering expertise with strategic business acumen, transforming innovative technical concepts into market-ready solutions, driving commercial impact and fostering entrepreneurial success.
- Leveraged robotic frameworks such as Robot Operating System (ROS) to streamline modular robotic design, accelerating prototyping, enhancing scalability, and ensuring seamless integration for complex robotic systems.

<b>Sami Figeac Aero Manufacturing LLC</b>	Jeddah, Saudi Arabia
Quality Engineer	September 2021 – July 2024

- Analyzed the different types of issues at the production by utilizing problem-solving approaches such as QRQC, 5 Whys analysis, Ishikawa, and 8D analysis, assisting in the smooth and continuous operations within the plant.
- Supervised the inspection process and the inspection team for the Eurofighter Typhoon refueling probe proof of concept project with BAE Systems. The proof of concept was approved by the customer which resulted in further future projects.
- Coordinated Safran's Engines components project for both Leap-1A & Leap-1B engines. The outcome was successful after conducting the First Article Inspection (FAI) per AS9100.
- Monitored and analyzed the KPIs for various projects and programs.

<b>Saline Water Conversion Corporation (SWCC)</b>	Shoaiba, Saudi Arabia
Operations Engineer	June 2018 – August 2018

- Conducted the steam turbine overhaul and dismembering of the main components and inspecting the damage within them.
- Monitored the operation of the thermal desalination process.
- Coordinated with Sasakura's project team members on the installation of the new MSF equipment in plant No.2.
- Reviewed the documents and plans and reporting to the project manager of Shoaiba RO Phase 4 Desalination Plant.

<b>Saudi Electricity Company (SEC)</b>	Tabuk, Saudi Arabia
Maintenance Engineer	July 2017 – August 2017

- Conducted the gas turbine's units' shutdown and overhaul with both the local maintenance teams and contracted maintenance teams.
- Assisted in the major & minor overhauls of GE 9HA, 7F.05, and GE TM2500 gas turbines.
- Tracked the new oil supply pipe project with SEC and Aramco engineers.

## Projects

<b>Carnegie Mellon University - Computational Engineering &amp; Robotics Laboratory</b>	Pittsburgh, Pennsylvania
<b>YKK AP Inc.</b>	August 2024 – Present

- Developed an FEA model for The Robotic 3D Metrology system in Additive Manufacturing applications; the results of the model were approved by YKK AP as the project's progress aligns successfully with the targeted performance criteria, validating the system's structural integrity and readiness for integration into subsequent prototyping phases.

<b>Sami Figeac Aero Manufacturing LLC</b>	Jeddah, Saudi Arabia
<b>Airbus</b>	March – June 2023

- Coordinated and analyzed Airbus's ongoing projects with the project managers of the machining and assembly plants in France for Airbus A320/A321neo wing ribs. The ribs are currently under serial production using Makino MAG3.EX.

## Awards & Certifications

<b>The Project Management Institute (PMI):</b> Project Management Professional (PMP).	May 2023
<b>Massachusetts Institute of Technology (MIT):</b> Management in Engineering: Accounting and Planning.	December 2022
<b>Massachusetts Institute of Technology (MIT):</b> Management in Engineering: Strategy and Leadership.	April 2022
<b>Airbus Defence and Space:</b> Introduction to Space Applications.	March 2022