

Yug Shah

+1-650-433-6830 | yug2711shah@gmail.com | linkedin.com/in/yug-shah | github.com/yug-shah

EDUCATION

Stanford University

Master of Science in Mechanical Engineering; GPA: 3.81/4.0

San Francisco, CA

Sept 2023 – June 2025 (Expected)

Pandit Deendayal Energy University

Bachelor of Technology in Mechanical Engineering; GPA: 9.67/10.0 (3rd among 200+ students)

Gandhinagar, India

Aug. 2018 – June 2022

EXPERIENCE

Rajhans Plastic Machinery

Junior Manufacturing Engineer

Ahmedabad, India

Feb 2021 – July 2021

- Optimized workflows, reducing production costs by 15% and waste by 10%.
- Assisted senior engineers in maintaining automated machinery, reducing downtime and defects by 12%.
- Monitored production data to identify process improvements and ensure smooth operations.

Pioneer Engineering Services

Manufacturing Engineer

Ahmedabad, India

Aug 2021 – Dec 2023

- Improved operational efficiency by 25% and reduced downtime by 20% through automation integration.
- Led cross-functional teams, increasing throughput by 15% and reducing defects by 20%.
- Reduced lead time from prototype to production by 10% through collaboration with R&D teams.

Star Pops Pty Ltd

Lean Manufacturing Engineer Intern

Pretoria, South Africa

July 2024 – Sept 2024

- Increased productivity by 36% and reduced downtime by 25% using lean manufacturing techniques.
- Cut material waste by 18% and reduced production costs by 20% through process improvements.
- Collaborated across teams to boost efficiency, contributing to a 12% market share growth.

PROJECTS

Optimizing Life's Blueprint: DNA Replication Modeling

Feb 2022 – Apr 2022

- Developed a computational model to study DNA replication under various environmental conditions such as temperature and pH.
- Provided insights into DNA replication sensitivity to environmental factors, aiding research in biological and medical fields.

Design and Simulation of Multi-Isotope PET Scanner

May 2024 – Aug 2024

- Collaborated with research teams to design and simulate a custom multi-isotope PET scanner, improving imaging capabilities for cancer research.
- Developed a custom cooling system for the PET scanner, enhancing system performance and longevity.

PUBLICATIONS

1. Effect of Near-Dry WEDM Process Variables through Taguchi-based-GRA Approach on Performance Measures of Nitinol MDPI, 2022

This paper explores the impact of near-dry WEDM process variables on Nitinol shape memory alloy, using a Taguchi-based-GRA approach to optimize performance measures.

2. Experimental Investigations and Effect of Nano-Powder-Mixed EDM Variables on Performance Measures of Nitinol SMA MDPI, 2022

Investigated the influence of alumina nano-powder in EDM processes on the machining performance of Nitinol shape memory alloys, with key findings on material removal rate and surface integrity.

3. Multi-Response Optimization and Influence of Expanded Graphite on Performance of WEDM Process of Ti6Al4V MDPI, 2023

Focused on the multi-response optimization for machining Ti6Al4V alloy, using expanded graphite to improve performance metrics like surface roughness and cutting speed.

TECHNICAL SKILLS

Languages: Python, C/C++, MATLAB, HTML, CSS, JavaScript

Software and Tools: AutoCAD, SolidWorks, Fusion 360, ANSYS, Git, Docker, TravisCI, VS Code, Salesforce

Cloud and Database Technologies: Google Cloud Platform, AWS, MySQL, PostgreSQL, Git, SVN