Himanshu Ashish Desai

Email: hadesai455@gmail.com | **Phone:** +1 4705963005 | **LinkedIn:** Himanshu-Desai
Portfolio: Himanshu-myfolio

Portfolio

EDUCATION

Georgia Institute of Technology   **Expected May 2027**
Master of Science | Aerospace Engineering

Vellore Institute of Technology, Vellore   **Awarded August 2024**
Bachelor of Technology | Mechanical Engineering | **CGPA** – 3.880/4.0

WORK/INTERNSHIP EXPERIENCE

Reliance Industries Limited (RIL)   (Jamnagar, Gujarat, India)
Assistant Manager (Shift Field Engineer) | JMD DTA – CPP   **August 2024 – May 2025**

- **Placed** at Domestic Tariff Area (DTA) – **Captive Power Plant** (CPP) – **Mechanical Operations**
- Oversaw safe and reliable operation of **Gas Turbines** (GTs), **Steam turbines**, boilers, and Heat Recovery Steam Generators (HRSGs).
- Was in charge of **4 out of 14 Frame 6B and Frame 9E GTs** (Manufactured by GE Vernova) at CPP.
- Worked on modified GTs capable of running on synthetic gas with **17-stage compressor** and **3-stage Turbine**.
- Participated in **3 projects** of **planned maintenance** of GTs and **1 Major Inspection** (MI) project on GE Frame 9E GT.
- Performed **day-to-day** activities of collecting **oil samples**, steam & water analysis, on-field **equipment observation**
- **Designed plot plan** for commissioning of **2 new combined cycle GT-HRSG systems** at CPP.
- Managed **5 field engineers** and **3 contractor teams** working on rotary components of the plant
- Assured **continuous supply** of **Power, Steam,** and **Boiler Feed Water** (BFW) to downstream plants.

Shutdown Maintenance Engineer | JMD DTA – CDU-1   **March 2025 – April 2025**

- Worked at the DTA – Crude Distillation Unit – 1 (**CDU-1**) under the **Heater** and **Heat Exchangers team**.
- Executed maintenance work for **3 crude heaters** and **90 shell & tube heat exchangers** and related equipment.
- Formulated crawler crane **rigging plan** for heat exchanger tube **bundle extraction**.
- Managed the operating team of the **Sarens Liebherr LR1300** Crawler Crane, working on crude heater maintenance.
- Supervised **12 hotwork contractor teams** for cutting, grinding, and welding jobs on heat exchangers and heaters.
- Ensured **timely completion** of maintenance and charging of equipment, **maximizing equipment uptime**.

Summer Intern | JMD DTA – Central Engineering Services (CES)   **May 2023 – July 2023**

- Performed **condition monitoring** on a **2.5 MW blower**, diagnosing root cause of frequent trips and **>90 dB noise** levels.
- Pinpointed faulty drive-end bearing, suggested **corrective actions**, extending bearing life, and **reducing maintenance downtime**.

Associated Power Structures Limited   (Vadodara, Gujarat, India)
Internship | Vocational Trainee   **June 2022 – July 2022**

- Assisted in surveys and design of **2 transmission towers**, covering **welding** and **galvanizing** processes, ensuring safety standards.
- Learned full tower lifecycle, quality control measures, and compliance with 765 kV load-bearing standards.

Shakun Polymers Limited (Orbia Group)   (Halol, Gujarat, India)
Internship | Manufacturing   **May 2022 – June 2022**

- Analysed the **Bühler palletizing system** in a high-volume polymer plant producing over **50 metric tons per day**.
- Gained technical expertise in compounding workflows, material evaluation techniques, and cable-grade polymer technology.

Kodacy SPACE   (Remote)
Internship | Robotics   **December 2021 – January 2022**

- Developed functional prototypes of **4 sensor-based robots** (Signal, Sound, Path-Following, & Motion).
- Executed virtual **assembly simulations** and **programmed microcontrollers** to control robot behaviour and task execution.

AWARDS AND CERTIFICATIONS

Autodesk CAD/CAM/CAE for Mechanical Engineering by AUTODESK   **April 2023**
MATLAB Programming Specialization by Vanderbilt University   **May 2023**
Six Sigma Green Belt Specialization by University Systems of Georgia   **May 2023**
Certified SOLIDWORKS Associate (CSWA) by Dassault Systems   **August 2023**

SKILLS AND COMPETENCIES

Technical Skills – CAD/CAM/CAE, Finite Element Analysis, Computational Fluid Dynamics, Thermal Fluid Systems, Mechanical Maintenance and operations, Manufacturing Production, FDM, SLM 3D Printing, Materials Testing, Lean Six Sigma
Software Tools – AUTODESK AutoCAD, AUTODESK Fusion 360, SOLIDWORKS, ADAMS, ANSYS (Fluent, Thermal, Static Structural, and modal), ANSYS ICEMCFD (Meshing Tool), OpenFoam, MATLAB/SIMULINK, Microsoft Suite (Word, Excel, Power Point, Visio, Project)
Management Courses Taken – Total Quality Management & Reliability, Industrial Engineering Management, Supply Chain Management, Operations Research
Coding Languages – Java (OOPS), C++ (basics), HTML/CSS/JS (Front End Dev.)