



Mechanical Engineer

Technical Skills ➤ CAD Design • GD&T (ASME Y14.5) • FEM, CFD • Technical Documentation • PLM • Prototyping • DFMA

Engineering Tools ➤ SolidWorks • Siemens NX • CATIA • ANSYS • OpenFOAM • Teamcenter

</> Python • C++ • Automation • Data Analysis • etc.

Professional Skills ➤ Technical Communication • Stakeholder Management • Multidisciplinary Collaboration

PROFESSIONAL BACKGROUND

Engineer and Founder

Morpheidos Tech

Mar 2025 - Present
The Randstad, Netherlands

Mechanical analysis support.

- Developed computational models (LBM, DSMC) to reduce simulation time supporting the design decisions for high-vacuum equipment.
- Developed a digital twin model to assess thermal performance in a district heating network to reduce 7% in thermal losses.

Product Developer

Amsterdam University of Applied Sciences, DSS

Jan - Jul 2026
Amsterdam, Netherlands

Led a multidisciplinary team of 5 from requirements definition to final 3D prototype delivery in an Agile project.

- Secured stakeholder consensus on a complex problem statement by establishing a unified scope.
 - Validated project requirements by aligning research findings and stakeholder input.
 - Built, and tested prototypes using CNC machining, 3D printing, and electronic modules.

Mechanical Engineer

ASML

Nov 2023 - Sep 2024
Veldhoven, Netherlands

Component engineering and design of complex mechanical components within Development & Engineering department.

- Prepared technical specifications and compliance criteria for mechanical vendor components.
- Technical liaison between internal competencies and external suppliers during NPI and qualification.
- Cut workload by ~50% by automating PLM workflow and engineering change management.
- Designed mechanical interfaces for core hardware modules.
 - GD&T, tolerance stack-up, DFMA, TPD, TDS, & BOM data using Siemens NX/TC.

Mechanical Design Engineer

AurangZib Gita Co.

Feb 2018 - Aug 2019
Isfahan, IR

Designed a high-pressure oxygen storage vessel for an electric arc furnace steel manufacturing plant.

- Structural design and calculations for a 40-bar vessel shell, using PV Elite per ASME VIII-1.
- Validated fatigue life per ASME VIII-2 FEM analysis [ANSYS Mechanical] & verified the 12% pressure drop on inlet manifolds [Fluent].

Developer | Project Lead

ITResearches

2015 - Jun 2018
Tehran, IR/London, UK

Developed software and delivered 10+ technical projects.

- Projects: Talee AI Intelligent Advertiser - International Corporate Services - Raya Office Solutions - MicrosoftPersia - IrPublishers - Vakaav - HotelM management (IOS, Android), ...

EDUCATION

MSc in Mechanical Engineering

Polytechnic University of Turin (PoliTo)

2023

Turin, Italy

Research Intern in Thermofluids Engineering
Eindhoven University of Technology (TU/e)

Jan - Dec 2023
Eindhoven, Netherlands

- Thesis: Secondary atomization and solidification of molten metal in gas atomization.
- Developed an OpenFOAM CFD model to simulate gas atomization dynamics.
 - implemented a thermal model for droplet cooling and solidification.
 - Verified the numerical implementation and validated results against experimental data.
 - Automated simulation and data analysis pipeline by bash/shell scripting for local and remote linux machines.

Guest Student | Energy Transition
ENSTA Paris, Polytechnic Institute of Paris

Apr - May 2022
Palaiseau, France

Resume

Deo Trovatore, M.Sc.
Eindhoven, NL
Tel. +31 (0)6 2241 0181
deotrovatore@outlook.com

BSc in Mechanical Engineering

University of Isfahan (UI)

2017

Isfahan, IR

Thesis: Thermal optimization and flow-field design of a liquid cooling plate for high temperature PEM fuel cell stack using ANSYS Fluent.

Mechanical Engineering Intern

May - Sep 2017

Mobarakeh Steel Co., Energy and Fluid distribution area.

Isfahan, IR

Performance analysis of the gas & steam power plant.