# EHSANODDIN GHORBANICHEMAZKATI

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#### WORK EXPERIENCE

### **Mechanical Engineer and Researcher**

Mar 2020 - Aug 2021

Hands-on Experiences for Bachelor's Final Project and Thesis

Islamic Azad University, Tehran, Iran

- An Experimental investigation into thermophysical properties of phase change materials inside a shell and tube heat exchanger and the effect of an appropriate fin on these properties.
- An experimental investigation into the impact of using phase change materials in wall layers and the effect of using nanoparticles on reducing energy loss.

## **Mechanical Engineer Intern**

Jul 2019 – Aug 2019

Mohandesi Farapardaz Arvand company (M.F.A)

Tehran, Iran

- Project: Designing gaskets with designing software (CATIA) and Manufacturing gaskets with CNC.
- Quality control of manufactured gaskets.

**Mechanical Engineer Intern** 

Jul 2018 - Aug 2018

Tehran, Iran

MAPNA (TUGA Branch) Company

Project: Designing the rotors stator of Gas turbines.

**Mechanical Engineer Intern** 

Jun 2016 - Aug 2016

Nargan Company

Tehran, Iran

Project: Optimal design of piping units of project of an oil distribution system in Khoozestan.

**Teaching Assistance** 

Jan 2015 - Day 2017

Islamic Azad university

Tehran, Iran

TA and grader for Mathematics-I course at University.

#### **EDUCATION**

## Stevens Institute of Technology

Dec 2022 - Dec 2024

Master of Science in Computer Science

Hoboken, NJ

Islamic Azad University

2016 - 2021

Bachelor of Science in Mechanical Engineering

Tehran, Iran

#### **NOTABLE PROJECTS**

#### **Food Image Recognition**

Implementing a Food Recognition system using a Convolutional Neural network.

## Home price prediction, Kaggle

Predicting home prices using Machine Learning. Compare different Models to reach an accuracy of 98%.

## Mechanical Engineering designing projects

Designing a shaft with CATIA for "Design of Machine Components I" and designing a gearbox by using CATIA for "Design of Machine Components II"

# Predicting a satellite movement

Predicting a satellite movement around the Earth for "Computer Programming" by using MATLAB and SIMULINK

# Analyzing a car suspension system

Analyzing and Simulation a car suspension system with MATLAB and SIMULINK for the "Automatic Control" course to find the most efficient hyper-parameters.

#### **CERTIFICATIONS**

Python Programming | Tehran Institute of Technology

Neural Networks and Deep Learning | Coursera

MATLAB for Mechanical Engineers | Tehran Institute of Technology

Designing with CATIA | Tehran Institute of Technology

## **SKILLS**

- Proficient in Python, with advanced work experience
- Proficient in MATLAB/Simulink, with advanced work experience
- Intermediate experience in JAVA and SQL
- Proficient in TensorFlow and PyTorch with advanced work experience
- Project Management Professional Excelling in Team Development and Project Delivery
- Social Media Management Professional
- IT Manager Specializing and Team Leadership