Sara Bakhtiari

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EDUCATION

Iran University of Science and Technology

Tehran, Iran

2016-2021

 $Bachelor\ of\ Mechanical\ Engineering$

• GPA: 15.76/20 (3.3/4)

• Notable Courses: Mechanical Vibrations, Mechanics of Materials, Statics, Dynamics

EXPERIENCE

Teacher Assistant

September 2021 – December 2021

Iran University of Science and Technology

Tehran, Iran

• Statics course

Research Interests

Computational Biomechanics Image-Based Modeling Hard & Soft Tissue Biomechanics Cardiovascular Anatomy & Physiology

Academic Research

Bachelor Degree Thesis

May 2019 – October 2021

- Simulation of the propagation of Ultrasonic shear waves in the tumor liver environment to diagnose cancer
- A Thesis Submitted in Partial Fulfillment of the Requirement for the Degree of Bachelor of Science in Mechanical Engineering
- Under supervision of Dr. Mansoor Alizadeh and Dr. Siavash Kazemirad

Projects

Construction of a Solenoid Engine and Control Its Speed with the Arduino Uno board

June 2020

- Mechanical design and optimal circuit inspection
- Experience with embedded systems design using the Arduino programming environment
- Machine construction

Design and Construction of a Wood Lathe Machine

July 2019

- Mechanical calculations and Constraint establishments
- Machine structure Design using SOLIDWORKS
- Machine construction

Design and Construction of a Hydraulic Powered Arm

April 2018

- Pressure calculations for circuit operation
- Mechanical design and modeling of arm parts to meet the desired degrees of freedom
- Construction of a Hydraulic Powered Arm

TECHNICAL SKILLS

Tools and Technologies: CATIA, AutoCAD, SolidWorks, COMSOL Multiphysics, Arduino, Microsoft Office

Programming Languages: Python, MATLAB, C++

Languages: Persian (Farsi), English

LICENSES & CERTIFICATIONS

IELTS Academic Training (Overall Band Score: 6.5)

November 2022 - November 2024

IELTS Official

• Listening: 6.5

• Reading: 6.0

• Writing: 6.0

• Speaking: 6.5

Member

Scientific Society

September 2017 – September 2019

Tehran, Iran

• Participated in activities and programs organized by Scientific Society of Mechanical Engineering of IUST

References

Dr. Siavash Kazemirad

Assistant Professor

- School of Mechanical Engineering, Iran University of Science and Technology, Narmak, Tehran, Iran 16846-13114
- Phone: 98-21-77240540 Ex: 8923
- E-mail: skazemirad@iust.ac.ir
- Relationship: Professor

Dr. Mansour Alizadeh

Assistant Professor

- School of Mechanical Engineering, Iran University of Science and Technology, Narmak, Tehran, Iran 16846-13114
- Phone: 98-21-77240540 Ex: 2958
- E-mail: ma_alizadeh@iust.ac.ir
- Relationship: Professor

Dr. Amir Mahdi Tahsini

Assistant Professor

- School of Mechanical Engineering, Iran University of Science and Technology, Narmak, Tehran, Iran 16846-13114
- Phone: 98-21-77240540 Ex: 8916
- E-mail: am_tahsini@iust.ac.ir
- Relationship: Professor