

Sarah Bakhtiari

sarahbakhtiari.github.io | sara_bakhtiari@mecheng.iust.ac.ir | linkedin.com/in/sarahbakhtiari

EDUCATION

Iran University of Science and Technology

Tehran, Iran

Bachelor of Mechanical Engineering

2016-2021

- 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

Human Movement Analysis

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

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 Robotic 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 Robotic Arm

TECHNICAL SKILLS

Tools and Technologies: CATIA, AutoCAD, SolidWorks, PDMS, CAESAR II, COMSOL Multiphysics, Carrier HAP, Revit, Navisworks, PIPENET, Arduino, Microsoft Office

Programming Languages: Python, MATLAB, C++

Industry Knowledge: Report Writing

Languages: Persian (Farsi), English

COMMUNITY & LEADERSHIP

Member

September 2017 – September 2019

Scientific Society

Tehran, Iran

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