

Sarah Bakhtiari

sarahbakhtiari.github.io | sarahbakhtiari@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
- 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

Mechanical Engineer

May 2021 – Present

Tadbir Sahel Pars

Tehran, Iran

- Pipe Infrastructure Design

Mechanical Engineer

December 2020 – May 2021

FGPco

Tehran, Iran

- Pipe Infrastructure Design

HVAC Engineer

September 2020 – December 2020

Mackesh & Dahesh co.

Tehran, Iran

- HVAC Design

R&D Engineer

June 2019 - September 2019

SAPCO

Tehran, Iran

- Internship

QA Engineer

June 2018 - September 2018

Part Sazan

Mashhad, Iran

- Internship

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

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| Construction of a Solenoid Engine and Control Its Speed with the Arduino Uno board | June 2020 |
| <ul style="list-style-type: none">• 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 |
| <ul style="list-style-type: none">• Mechanical calculations and Constraint establishments• Machine structure Design using SOLDWORKS• Machine construction | |
| Design and Construction of a Hydraulic Powered Robotic Arm | April 2018 |
| <ul style="list-style-type: none">• 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

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|---|---------------------------------|
| Member | September 2017 – September 2019 |
| <i>Scientific Society</i> | <i>Tehran, Iran</i> |
| <ul style="list-style-type: none">• Participated in activities and programs organized by Scientific Society of Mechanical Engineering of IUST | |