Sarah Bakhtiari

sarahbakhtiari.github.io | sarahbakhtiari20@gmail.com | linkedin.com/in/Sarah-Bakhtiyari/

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 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 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, COMSOL Multiphysics, Carrier HAP, Revit, Navisworks, Arduino, Microsoft Office
Programming Languages: Python, MATLAB, C++
Industry Knowledge: Report Writing
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

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