# Sara 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: Statics, Introduction to Finite Element Method, Solid Mechanics, 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

## 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