Sarah Bakhtiari

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EDUCATION

Iran University of Science and Technology <div align="right">Tehran, Iran</div>
Bachelor of Mechanical Engineering <div align="right">*2016-2021*</div>
- GPA: 15.76/20 (3.3/4)
- Notable Courses: Mechanical Vibrations, Mechanics of Materials, Statics, Dynamics

EXPERIENCE

Teacher Assistant <div align="right">September 2021 – December 2021</div>
Iran University of Science and Technology <div align="right">*Tehran, Iran*</div>
- Statics course

RESEARCH INTERESTS

Computational Biomechanics
Image-Based Modeling
Hard & Soft Tissue Biomechanics
Human Movement Analysis

ACADEMIC RESEARCH

Bachelor Degree Thesis <div align="right">May 2019 – October 2021</div>
- 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 <div align="right">June 2020</div>
- 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 <div align="right">July 2019</div>
- Mechanical calculations and Constraint establishments
- Machine structure Design using SOLDWORKS
- Machine construction

Design and Construction of a Hydraulic Powered Robotic Arm <div align="right">April 2018</div>
- 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 <div align="right">September 2017 – September 2019</div>
Scientific Society <div align="right">*Tehran, Iran*</div>
- Participated in activities and programs organized by Scientific Society of Mechanical Engineering of IUST