

# HEDIYEH SAVARI

[Website](#)  
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[Email Address](#)  
Tehran, Tehran, Iran  
Phone Number: (+98)9370763755

## EDUCATION

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<b>University of Tehran</b> Master's Degree, Microelectromechanical Systems (MEMS)	<i>Sep. 2018 - Jul. 2022</i> GPA: 4/4 (18.19/20)
<b>Iran University of Science and Technology</b> Bachelor's Degree, Electrical and Electronics Engineering	<i>Sep. 2013 - Sep. 2018</i> GPA: 3/4 (15.02/20)
<b>National Organization for Development of Exceptional Talents</b> High School Diploma, Mathematics	<i>Sep. 2009 - Sep. 2013</i> GPA: 4/4 (19.66/20)

## PROJECTS

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<b>Design and Fabrication of a Multifunctional Flexible Strain and Pressure Sensor based on Conductive Nanocomposites</b> Master's Thesis, University of Tehran Supervisor: Alireza Nikfarjam	<i>Feb. 2021 - Jul. 2022</i>
<b>Design and Fabrication of Superconducting, Stable, and Low-Cost Electrodes on Flexible Substrates</b> Supervisor: Alireza Nikfarjam, University of Tehran	<i>May. 2021 - Sep. 2021</i>
<b>Synthesis of Ultra-Thin Long Silver Nanowires (AgNWs) to Create Flexible, Transparent, and Conductive Electrodes</b> Supervisor: Alireza Nikfarjam, University of Tehran	<i>Feb. 2019 - Feb. 2020</i>
<b>Investigating the Structure, Properties and Behavior Prediction of GaAs Semiconductor Laser with 808(nm) Radiation Wavelength and Less than 5(nm) Bandwidth</b> Undergraduate's Thesis, Iran University of Science and Technology Supervisor: Vahid Reza Yazdanpanah	<i>May. 2018 - Sep. 2018</i>

## RESEARCH INTERESTS

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Flexible Sensors	MEMS/NEMS
Wearable Sensors	Nanotechnology
Multifunction Sensors	Nanoelectronics
Sensor Fabrication	Smart Materials
Flexible electronics	Disease Diagnosis
Artificial Intelligence	Machine Learning
Remote Sensing and Image Processing	Optimization

## PUBLICATION

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**H.Savari, A.Nikfarjam** - "Design and fabrication of a flexible strain and pressure sensor based on conductive nanocomposites," 2023. *under preparation*

## EXPERIENCE

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### Teaching Assistant at Advanced Micro and Nano Device Lab

*Sep. 2021 - Sep. 2022*

Lecturer: Alireza Nikfarjam, University of Tehran

Teaching new students the fundamentals of working in the cleanroom environment and instructing them in various fabrication techniques

## SKILLS

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### Laboratory Skills

Research and Development (R&D), Device Fabrication, Microfabrication, Nanomaterial Synthesis, DC and RF Sputtering, Chemical Vapor Deposition (CVD), Physical Vapor Deposition (PVD), Spin Coating, Doctor Blade Coating, Mask Design, Photolithography, Lift-off Process, Wet and Dry Etching

### Characterization Skills

Scanning Electron Microscopy (SEM), Transmission Electron Microscopy (TEM), X-ray Diffraction (XRD), Scanning Tunneling Microscopy (STM), UV/Vis Spectroscopy, FTIR Spectroscopy, Raman Spectroscopy, Compound Light Microscopic Analysis

### Software Skills

COMSOL, Silvaco, CorelDRAW, Photoshop, Premiere, Microsoft Office

### Programming Languages and Frameworks

Python, Matlab, C++, HTML, Wolfram Mathematica, LaTeX

### Soft Skills

Communication, Collaboration, Problem-solving, Critical thinking, Decision-making, Work Ethic, Creativity, Self-Motivation, Public Speaking, Active Listening, Adaptability, Cultural Sensitivity, Leadership, Conflict Management, Professional Attitude, Time Management, Teamwork, Networking

## LANGUAGE SKILLS

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**English** (Advanced and Fluent) , TOEFL iBT: Overall score: 98

*10th Sep., 2023*

(Reading: 24, Listening: 27, Speaking: 23, Writing: 24)

**Persian** (Native), **Arabic** (Upper intermediate), **German** (Beginner)

## ACTIVITIES

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### - Deputy Head and the Documentary Writer of the Student Scientific Association of Electrical Engineering

Iran University of Science and Technology

*2016-2017*

### - Honorary Member of the Student Scientific Association of Electrical Engineering

Iran University of Science and Technology

*2015-2016*

### - Honorary Member of the Cultural Office of the Faculty of Electrical Engineering

Iran University of Science and Technology

*2014-2015*

## AWARDS AND HONORS

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### - Ranked 2nd in the M.Sc. cohort of 2018, Microelectromechanical Systems (MEMS) Program

University of Tehran

*by the time of graduation*

### - Tuition Fee Waiver Scholarship, Graduate Program

University of Tehran

*Sep. 2018 - Jul. 2022*

### - Tuition Fee Waiver Scholarship, Undergraduate Program

Iran University of Science and Technology

*Sep. 2013 - Sep. 2018*

- **Ranked 1445th among 250,000 participants in the Iranian Nation-wide University Entrance Exam Known as Konkour for B.Sc degree in Engineering** *Sep. 2013*

- **Admitted to attend NODET (National Organization for Development of Exceptional Talents) by taking the NODET exam** *Sep. 2009*

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## LICENSES AND CERTIFICATIONS

- **Recent Advances in Freeform Electronics**, (offered by Yonsei University)

Coursera, Credential ID QCVZFHCKBF37

*Issued May 2023*

- **Programming for Everybody** (Getting Started with Python), (offered by University of Michigan)

Coursera, Credential ID GWSLB43EDL8A

*Issued Mar 2023*

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## SELECTED COURSES

Modern Physics, 18/20

Sensors and Micromachine, 19/20

Nano-materials Characterization Methods, 18.5/20

Nanobiotechnology, 18.3/20

Theory and Technology of Semiconductors, 19.25/20

Nanotechnology, 18.25/20

Special Topics in Micro- and Nano- electromechanical Systems, 18/20

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## HOBBIES

Chess, Hiking, Swimming, Fitness, Traveling

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## REFERENCES

### **Alireza Nikfarjam**

Email Address: a.nikfarjam@ut.ac.ir

Title: Associate Professor at University of Tehran, Tehran, Tehran, Iran

### **Aliakbar Jalali**

Email Address: drjalali@gmail.com

Titles:

Adjunct Professor at University of Maryland Baltimore County, Catonsville , Maryland , United States

Adjunct Professor at West Virginia University, Morgantown, West Virginia, United States

Professor at Iran University of Science and Technology, Tehran, Tehran, Iran

### **Vahid Reza Yazdanpanah**

Email Address: Vahpap@yahoo.com

Title: R&D Scientist and Process Engineer at Santa Rosa, California, United States

Former Assistant Professor at Iran University of Science and Technology

### **Hassan Hajghassem**

Email Address: hajghassem@ut.ac.ir

Title: Associate Professor at University of Tehran, Tehran, Tehran, Iran

### **Javad Koohsorkhi**

Email Address: koohsorkhi@ut.ac.ir

Title: Associate Professor at University of Tehran, Tehran, Tehran, Iran

### **Reza Askari Moghadam**

Email Address: r.askari@ut.ac.ir

Title: Researcher at Université Paris-Est Créteil (UPEC), Créteil, Île-de-France, France

Former Associate Professor at University of Tehran, Tehran, Tehran, Iran