

HEDIYEH SAVARI

[Github Portfolio](#)
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Tehran, Tehran, Iran
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EDUCATION

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

PROJECTS

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|---|------------------------------|
| Design and Fabrication of a Multifunctional Flexible Strain and Pressure Sensor based on Conductive Nanocomposites Master's Thesis, University of Tehran Supervisor: Alireza Nikfarjam | <i>Feb. 2021 - Jul. 2022</i> |
| Design and Fabrication of Superconducting, Stable, and Low-Cost Electrodes on Flexible Substrates Supervisor: Alireza Nikfarjam, University of Tehran | <i>May. 2021 - Sep. 2021</i> |
| Synthesis of Ultra-Thin, Long Silver Nanowires (AgNWs) for the Fabrication of Flexible, Transparent, and Conductive Electrodes Supervisor: Alireza Nikfarjam, University of Tehran | <i>Feb. 2019 - Feb. 2020</i> |
| Design and Fabrication of a Nickel-Based Micro-Heater Supervisor: Alireza Nikfarjam, University of Tehran | <i>May 2019 - Jul. 2019</i> |
| Investigating the Structure, Properties, and Behavior Prediction of GaAs Semiconductor Lasers with 808 nm Radiation Wavelength and Bandwidth Less than 5 nm 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/Wearable/Multifunction Sensors | Disease Diagnosis |
| Flexible/Wearable/Stretchable Electronics | Nanoelectronics |
| Transparent/Printed Electronics | Nanotechnology |
| Lab-on-a-Chip Technology | MEMS/NEMS |
| Smart Materials/Textile | Optimization |
| Sensor Fabrication | Machine Learning |
| Electronic Skin | Artificial Intelligence |
| Soft Robotics | Human-Machine Interactions |
| Health Monitoring | Remote Sensing and Image Processing |

PUBLICATION

H.Savari, A.Nikfarjam - "Design and Fabrication of a Multifunctional Flexible Strain and Pressure Sensor based on Conductive Nanocomposites," 2023. *under preparation*

EXPERIENCE

Teaching Assistant at Advanced Micro and Nano Device Lab *Feb. 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

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 Multiphysics, Silvaco, CorelDRAW, Photoshop, Premiere, Microsoft Office

Programming Languages and Frameworks

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

LANGUAGE SKILLS

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

- **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

- **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*

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*

SELECTED COURSES

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| 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 | |

HOBBIES

Chess, Hiking, Swimming, Fitness, Traveling

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