

# Azadeh DOROUDCHI

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AFFILIATION: Graduated from [University of Tehran](#),  
Was a member at [Tarlab](#)  
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[doroudchi@ut.ac.ir](mailto:doroudchi@ut.ac.ir)

## RESEARCH INTERESTS

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Robotics, Mechatronics, Smart Materials, Nonlinear Control, Adaptive Control, System Identification, Optimization, Neural Networks, Artificial Intelligence.

## ACADEMIC BACKGROUND

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| 2013 - 2016 | <b>MSc</b> , University of Tehran, (Mechatronics Engineering)<br><b>GPA:</b> 18.81 (out of 20)<br><b>Thesis:</b> Design, Modeling, Manufacturing and Control of Rotary Actuator Actuated by Shape Memory Alloy Wires.<br><b>Core modules:</b> Advanced Robotics, Mechatronics I-II, Nonlinear Control, System Identification, Artificial Intelligence, Advanced Engineering Mathematics.  |
| 2008 - 2012 | <b>BSc:</b> Shiraz University (Electrical Engineering, Control field).<br><b>GPA:</b> 16.30 (out of 20)<br><b>Thesis:</b> Designing and constructing an AC/DC Converter with various ranges of output voltage (+2-50 Voltage) by new approach in digital controlling of Buck and Boost converters.<br><b>Core modules:</b> Digital Control Systems, Modern Control Systems, Industrial Control I, Industrial Control II (PLC), Linear Control Systems, Instrumentation, Fundamentals of Microcomputers, Modern Physics. |
| 2004 - 2008 | <b>High School</b> , NODET (National Organization for Development of Exceptional Talents), Shiraz branch, Iran.<br><b>GPA:</b> 19.81 (out of 20)  |

## ACCEPTED PAPERS

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| <i>ICROM 2015</i> , indexed in IEEE Xplore         | An Experimental Study on Open-loop Position and Speed Control of a 3-RRR Planar Parallel Mechanism            |
| <i>ICE 2016</i> , International Conference, Dubai  | Modeling and Simulation of a SMA-Actuated Rotary Manipulator with Experimental Validation                     |
| <i>ICROM 2016</i> , will be indexed in IEEE Xplore | Experimental Identification of Friction and Dynamics of an Overconstrained 3-DOF Decoupled Parallel Mechanism |

## SUBMITTED PAPERS

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| <i>Sensors and Actuators A: Physical</i> | Modeling and control of a fast response SMA-actuated rotary manipulator with experimental data |
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## INDUSTRIAL EXPERIENCES (INTERNSHIP)

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- Spring 2013* **Shiraz Petrochemical Company (SPC)**, Shiraz, Fars, Iran. The company's activity is in producing Fertilizers. Worked in utility unit control room.
- Summer 2011* **Noavaran Hooshmand Fars Co.**, Shiraz, Iran. The company's activities are focused on intelligent buildings and building management systems.

## HONORS

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- Ranked 1<sup>st</sup> among Mechatronics Engineering students throughout MSc.
- Ranked 41 among 100,000 students in Islamic Azad University's MSc entrance exam of electrical engineering, Iran, 2013.
- Ranked 687 among 300,000 students in National BSc entrance exam of math and physics, Iran, 2008.
- Ranked 10 among 300,000 students in Islamic Azad University's BSc entrance exam of math and physics, Iran, 2008.
- Ranked 1<sup>st</sup> among 200 selected students in Chemistry Lab Competition among high school students, Fars, Iran, 2007.
- Chemistry Olympiad winner, Iran, 2007.

## PROGRAMMING SKILLS

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- **Engineering Software:** LabVIEW, Pspice, SolidWorks.
- **Programming:** MATLAB, Qt creator, C++, Arduino ide, Bascom(AVR), CodeVision(AVR).
- **Office Software Suit:**  $\text{\LaTeX}$ , Microsoft Office.

## EXTRACURRICULAR ACTIVITIES

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- Active committee member of Society of Electrical Engineering at Shiraz University, 2008-2012.
- Active member and one of the founders of IEEE's Shiraz University Section (Iran). Recruiting new members and organizing events.
- Attending introductory courses in Nano-Materials, Shiraz Nano Technology Research Center.

## LANGUAGES

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- **English:** Fluent.  
TOEFL iBT: 94 → R.:22, L.: 23, S.: 22, W.: 27.  
GRE General CBT → V.: 140, Q.: 164, A.W.: 3.
- **Persian:** Native.
- **Arabic:** Basic Knowledge.

## PERSONAL INTERESTS

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- **Music:** Playing piano.
- **Sport:** Swimming, Mountain Climbing.

## REFERENCES

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**Dr. Mohammad Reza Zakerzadeh**  
Assistant Professor  
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**Dr. Mehdi Taleh Masouleh**  
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**Dr. Alireza Keshavarz Haddad**  
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