

Curriculum Vitae

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PERSONAL INFORMATION

- **Name:** Ehsan Sharafian Ardakani
- **Date and Place of Birth:** Mar. 5, 1988, Tehran, Iran
- **Marital Status:** Single
- **Tel:** (+98) 912-693-6982
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RESEARCH INTERESTS

- *Control of nonlinear systems*
- *Control of mobile robots and wheeled robots*
- *SLAM*
- *Swarm robots*
- *Sensor Fusion*
- *Control of parallel and series mechanism*

EDUCATION

- *Master of Science, Mechatronics Engineering* Sep. 2011-present
University of Tehran (UT), Tehran, Iran,
Field of research: Swarm Robots
CGPA: 17.81/20
- *Bachelor of Science, Mechanical Engineering* Sep. 2006 - Jan. 2011
K. N. Toosi University of Technology (KNTU), Tehran, Iran,
Major: Thermo-Fluid Mechanics
CGPA: 15.44/20

ACADEMIC EXPERIENCES

- *Designing a control system to displace objects in dangerous environments by swarm robots*
M.Sc. thesis 2011-Present
Supervisors: Dr. M. Tale Masouleh, Dr. A. Ghaffari
- *Leader of research team working on path planning of swarm robots via potential field based on fuzzy controlling*
Robotics Research Lab., UT 2013-Present
- *Design an algorithm for detection of object using machine vision by e-puck robot*

- Robotics Research Lab., UT 2012-2013
- *Leader of research team working on design a nonlinear controller and optimal controller for path tracking by e-puck robot*
Robotics Research Lab., UT 2012-2013
- *Leader of research team working on design a network for determination of objects position using neural network by e-puck robot*
Robotics Research Lab., UT 2012-2013
- *Design a GUI for determination of series robot parameter*
Robotics Research Lab., UT 2011-2012
- *Combustion simulation of water tube boiler of Tehran Power Plant*
K.N.Toosi University of Technology 2010-2011
B.Sc. thesis
Supervisor: Dr. M. Ziabasharhagh

JOB EXPERIENCES

- *Technical engineer in Canadian Maple Instrument Co.* 2011-2012
- *Combustion simulation and design a software for water tube boiler of Tehran Power Plant (Montazer Gha'em).* 2010-2011
- *Researcher in National Iranian Gas Company (NIGC) and design a gas distribution network (Shahid Bagheri town).* 2010-2011

COMPUTER SKILLS

- *MATLAB, Maple, Fluent, Catia, Aspen, Carrier, C, C++, Webots*

PUBLICATIONS

- E. Sharafian Ardakani, F. Ansari Eshlaghi, M. Daneshmand, M. Tale Masouleh, M. B. Menhaj, and A. Ghaffari. “*Path Planning and Obstacle Avoidance of Mobile Robots via Potential Field Based Fuzzy Controlling,*” In 13th Iranian Conference on Fuzzy Systems (IFSC). IEEE, 2013.
- E. Sharafian Ardakani, M. Tale Masouleh, and A. Ghaffari. “*Environment and Objects Detection Using E-puck Robot,*” In ECCOMAS Multibody Dynamics 2013, University of Zagreb, Croatia, 2013.
- M. Daneshmand, M. H. Saadatzi, M. Tale Masouleh, E. Sharafian Ardakani, and M. B. Menhaj. “*Optimization of Kinematic Sensitivity and Workspace of Planar Parallel Mechanisms,*” In ECCOMAS Multibody Dynamics 2013, University of Zagreb, Croatia, 2013.
- A. Kosari, E. Sharafian Ardakani, M. Daneshmand and M. Farzaneh. “*Path Planning Of E-puck Robot in Known and Unknown Environment Using Optimal Control,*” In The Iranian Conference on Intelligent Systems (ICIS), Iran, 2013 (In Persian)

- E. Sharafian Ardakani, M. Daneshmand, M. Tale Masouleh, A. Kalhor, M. B, Menhaj, and A. Ghaffari. “A Novel Approach for the Position and Orientation Estimation of the Mobile Robots: Using Neural Networks and Artificial Neuro-Fuzzy Inference Systems,” Submitted in Robotica.

Honor

- Rank 4th among 18 students in M.Sc. in mechatronics engineering, University of Tehran (2013)
- Rank 650th among 13000 participants for M.Sc. degree entrance exam (2011)
- Rank 1057th among 450,000 participants for B.Sc. degree national university entrance exam (2006)

REFERENCES

- *Dr. Mehdi Tale Masouleh*
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- *Dr. Ali Ghaffari*
Faculty of Mechanical Engineering, K.N.Toosi University of Technology
Email: ghaffari@kntu.ac.ir