



BIOGRAPHICAL SKETCH

	Mechatronics Department, Faculty of Engineering, University of Isfahan, P.O.Box 81746-73441 Isfahan, Iran	
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NAME: Hamed Shahbazi.

POSITION TITLE: Assistant Professor of Mechatronic Engineering

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	Start Date	Completion Date	FIELD OF STUDY
University of Isfahan, Isfahan, Iran	Ph.D.	2009	2013	Robotics and Artificial Intelligence
University of Isfahan, Isfahan, Iran	M.Sc.	2007	2009	Robotics and Artificial Intelligence
University of Isfahan, Isfahan, Iran	B.S.	2003	2007	Computer Hardware Engineering

A. Research Interest

- Robotics
- Artificial Intelligence
- Machine Learning
- Internet of Things
- Sensor Networks

B. Positions and Honors

Positions and Employment

2013-Present	The head of robotic association, University of Isfahan, Iran
2013-Present	Assistant Professor, Department of Mechanical Engineering, University of Isfahan, Isfahan, Iran
2013-2016	The head of office for commercialization of research, University of Isfahan, Iran
2010-2012	Lecturer, Department of Computer Engineering, Sheykhbahaee University, Baharestan, Isfahan, Iran
2010-2015	Invited lecturer, Islamic Azad university of Majlesi, Isfahan, Iran.

Other Experience and Professional Memberships

Iranian Association of Mechanical Engineering (ISME)

Robotics Society of Iran (RSI)

Computer Society of Iran (CSI)

International memberships

Association of Computing Engineering (ACM)

Reviewer in the international journals

Robotica.

Knowledge based systems

Journal of Mechanical Science and Technology.

etc.

Honors and Awards

- 1th place in the Rescue simulation league, Agent Competition, Brave Circles Team, Iran open 2011 ,Tehran, Iran.
- 2th place in the Rescue simulation league, Agent Competition, Brave Circles Team, AutCup 2011 ,Terhran, Iran.
- 1th place in the Rescue simulation league (Infrastructure), Brave Circles Team, RoboCup 2010 Singapore.
- 1th place in the Rescue simulation league (Infrastructure) ,RoboCup 2008 Brave Circles Team, Souzhou, China.
- 2th place in the Game Competition of Physical visualization competition league, UI-AI Team ,RoboCup 2007, Atlanta,USA.
- 2th place in Rescue simulation league AI GAMES 2005, Bam Team, Isfahan,Iran.
- 2th place in Rescue simulation league Civil Robots 2006, Bam Team, Tehran, Iran.
- Silver Medal in Iranian National Student Olympiad in Computer Engineering, 2007.
- Bronze Medal in Iranian National Student Olympiad in Computer Engineering, 2006.
- Best Student Award of University of Isfahan, Isfahan 2007.
- Award of Best Student of Artificial Intelligence Student in computer engineering, university of Isfahan, Isfahan 2008.
- Award of Best Student of Hardware and Software Student in computer engineering, university of Isfahan, Isfahan 2006.

Research projects (projects with Industry, multi-partner collaborations)

I have performed over 20 industrial projects since 2008 in the field of Information technology and mechatronics. These projects have been run according to the official contracts with some Iranian companies including Optics company of Isfahan, Payam Pardaz Corporation, Dideh Pardaz Saba Company, Innovation village Company, etc.

Currently, I am the vice president and the head of research and development department in a knowledge-based company named Unitech, Isfahan, Iran.

C. Contributions to Science

Top five published papers in the research lines

1. Shahbazi Hamed, Parandeh Reyhaneh, Jamshidi Kamal, "Implementation of Imitation Learning using Natural Learner Central Pattern Generator Neural Networks", *Neural Networks*, (2016).
2. Shahbazi Hamed, Kamal Jamshidi, Amir Hasan Monadjemi, and Hafez Eslami. "Biologically inspired layered learning in humanoid robots." *Knowledge-Based Systems* 57, 8-27(2014).
3. Shahbazi Hamed, Kamal Jamshidi, Amir Hasan Monadjemi, and Hafez Eslami Manoochehri. "Training oscillatory neural networks using natural gradient particle swarm optimization. *Robotica* (2015).
4. Shahbazi Hamed, Kamal Jamshidi, and Amir Hasan Monadjemi. "Sensor-based programming of central pattern generators in humanoid robots." *Int J Adv Robotic Sy* 10, no. 192 (2013).
5. Shahbazi Hamed, Kamal Jamshidi, and Amir Hasan Monadjemi. "Modeling of mesencephalic locomotor region for Nao humanoid robot." *Industrial Robot: An International Journal* 39, no. 2 (2012): 136-145.

Other selected published ISI papers

1. Shahbazi Hamed, Parandeh Reyhaneh, Jamshidi Kamal. "Generation of Rhythmic Hand Movements in Humanoid Robots by a Neural Imitation Learning Architecture" *Biologically Inspired Cognitive Architectures*, (2016).
2. Shahbazi Hamed, Arshi, Maliheh Alsadat, Jamshidi Kamal. " Demonstration learning of robotic skills using repeated suggestions learning algorithm" *Biologically Inspired Cognitive Architectures*, (2017).
3. Eslami Hafez, Kamal Jamshidi, Amir Hassan Monadjemi, and Hamed Shahbazi. "Finding Curvilinear Path Features in a Layered Learning Paradigm for Humanoid Robot Using Monocular Vision." *International Journal of Humanoid Robotics* 11, no. 03 (2014).

Selected Published ISC papers

- Tikani Vahid, Shahbazi, Hamed, "Design and Practical Implementation of attitude PID controller with fuzzy system to adjust the controller gain values for quadrotor", *MODARES MECHANICAL ENGINEERING*, (2016).
- Shahbazi, Hamed, Tikani Vahid, "Analytical Study of Metaheuristic Algorithms on Optimization of Controllers in Quadrotor Drones", *Science and Technology of Aerospace*, (2016).
- Parandeh Reyhaneh, Shahbazi Hamed, Jamshidi Kamal. "Design of a Trainable Controller Inspired from Neural System to Generate Complex Behaviors in Humanoid Robots" *MODARES MECHANICAL ENGINEERING*, (2016) (2), 59-68
- Shahbazi, Hamed, Sajjad Salehi, and Mostafa Movahedi. "Delayed Rewards vs. Evolving Fuzzy Neural Network, for Firebrigades in RoboCupRescue Simulation." In *Advanced Materials Research*, vol. 433, pp. 917-921. 2012.8
- Shahbazi, Hamed, Kamal Jamshidi, and Amir Hasan Monadjemi. "Curvilinear bipedal walk learning in NAO humanoid robot using a CPG based policy gradient method." In *Applied Mechanics and Materials*, vol. 110, pp. 5161-5166. 2012.

Selected Conferences and Proceedings

- Shahbazi, H., M. A. Araghizadeh, and M. Dalvi. "Minimum power intelligent routing in wireless sensors networks using self organizing neural networks." In Telecommunications, 2008. IST 2008. International Symposium on, pp. 354-358. IEEE, 2008.
- Aghaei, N.G. Shahbazi, H. Farzaneh, P. Abdolmaleki, A.Khorsandian, A. The structure of personality-based emotional decision making in robotic rescue agent, IEEE/ASME International Conference on Advanced Intelligent Mechatronics, 2008. AIM 2008.
- H.Shahbazi, R.Zafarani, Priority Extraction Using Delayed Rewards in Multi Agents Systems : A Case Study in RoboCup, In the proceedings of the 11th International Computer Society of Iran Computer Conference (CSICC2006), Tehran, Iran (Poster Paper)
- Behrouz Shahgholi Ghahfarokhi, Hamed Shahbazi, Mohammad Kazemifard, Kamran Zamanifar, Evolving Fuzzy Neural Network Based Fire Planning in Rescue Firebrigade Agents, In the proceedings of the 2006 Summer Computer Simulation Conference (SCSC'06), calgary, Canada
- Hamed Shahbazi, Alireza Mokhtaripour, Mohammad Dalvi, Behrouz Tork Ladani, A new approach for scoring relevant documents by applying a Farsi stemming method in Persian web search engines . In the proceedings of the 13th International Computer Society of Iran Computer Conference (CSICC2008), Tehran, Iran

The complete conference presentation list is available at <http://engold.ui.ac.ir/~shahbazi>.

Book, book chapters, Encyclopedia chapters

“Wireless Sensor Networks, From Theory to Practice”

Patents

1. -----“Imitation humanoid robot based for advertisement”, Iran Ministry of Justice, Registration No. 93322, 2017.
2. -----“New generation of secure ADSL-Modem”, Iran Ministry of Justice, Registration No. 92330, 2017.
3. -----“Wireless soccer-meter sensors for player analysis”, Iran Ministry of Justice, Registration No. 90262, 2016.
4. -----“Intelligent layered control autopilot for drones”, Iran Ministry of Justice, Registration No. 86743, 2015.

D. Additional Information: Selected Courses

YEAR	COURSE TITLE	MAJOR
2013- present	COMPUTER PROGRAMING	Mech. Eng. (BSc)
2014-present	NUMERICAL ANALYSIS	Mech. Eng. (BSc)
2013- present	ADVANCED ROBOTICS	Mechatronics (MSc)
2010- present	ARTIFICIAL INTELLIGENCE	Mechatronics (MSc)
2013-present	MECHATRONICS (1)	Mechatronics (MSc)
2011-2015	DISTRIBUTED ARTIFICIAL INTELLIGENCE	Mechatronics (MSc)
2010-2015	EXPERT SYSTEMS	Mechatronics (MSc)
2010-2015	REAL TIME SYSTEMS	Mechatronics (MSc)

E. Additional Information: Distinguished Researcher (OPTIONAL)

Item	Value	Web address
Scopus Author ID	24923956200	https://www.scopus.com/authid/detail.uri?authorId=24923956200
Google Scholar	Hamed Shahbazi	https://scholar.google.com/citations?user=-tRm_SsAAAAJ&hl=en
ResearchGate	Hamed Shahbazi	https://www.researchgate.net/profile/Hamed_Shahbazi2