

# Reza Iraji

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## CONTACT INFORMATION

E-mail: rezairaji@gmail.com  
Website: <http://www.iraji.org>

## EDUCATION

### **Sharif University of Technology**

*Master of Science, Computer Engineering*  
GPA: 18.35 out of 20.

**September 2004 – January 2007**

### **Azad University - South Tehran**

*Bachelor of Science, Computer Engineering*  
GPA: 18.39 out of 20.

**February 2002 – February 2004**

### **Shahid Chamran University**

*Associate of Science, Computer Software*  
GPA: 18.11 out of 20.

**February 2000 – February 2002**

## APPOINTMENTS

### **Colorado State University**

*Graduate Research Assistant*

**May 2015 - December 2016**

### **Colorado State University**

*Graduate Teaching Assistant*

**August 2014 - May 2015**

*Undergraduate courses: Algorithms and Data Structures, and System Architecture and Software.*

### **Wayne State University**

*Graduate Research Assistant*

**May 2014 - August 2014**

### **Wayne State University**

*Graduate Teaching Assistant*

**August 2013 - April 2014**

*Graduate courses: Design and Analysis of Algorithms, and Graduate Seminar.*

### **Azad University**

*Instructor*

**September 2006 - February 2013**

*Undergraduate courses: Artificial Intelligence, Algorithm Design, Computer Architecture, Motion Planning, Visual C#, Computer Programming II (C++), Machine Organization and Language (Assembly), Computer Networks, and Operating Systems.*

### **IRISA Company**

*Developer and IT Manager*

**June 2004 - August 2004**

## PROFESSIONAL ACTIVITIES

*Organizer*

1<sup>st</sup> international workshop on Robot Learning and Planning (RLP)  
Founder of Colorado State University's RoboCup team

**February 2016 - June 2016**  
**October 2015 - Present**

*Reviewer*

IEEE/RSJ Int. Conf. on Intelligent Robots and Systems (IROS 2016)

**March 2016 - July 2016**

*Member*

IEEE RAS Tech. Comm. in Algorithms for Planning and Control of Robot Motion  
IEEE

**7 years**

Sharif University of Technology's RoboCup team

**July 2005 - June 2006**

## HONORS AND AWARDS

*Graduate Assistantship*

Colorado State University

**August 2014 - December 2016**

Graduate Assistantship  
Wayne State University

August 2013 - August 2014

Rumble Fellowship  
Wayne State University

January 2013 - May 2013

Selected as National Elite  
Iran's National Institute of Elites

February 2010

Selected as Brilliant Talent  
Sharif University of Technology

February 2007

Ranked 1<sup>st</sup> among Graduated M.Sc. Students in Computer Engineering  
Sharif University of Technology  
Minor: Computer Architecture.

February 2007

Ranked 1<sup>st</sup> among Graduated B.Sc. Students in Computer Engineering  
Azad University - South Tehran  
Minor: All.

February 2004

Ranked 1<sup>st</sup> among Graduated A.Sc. Students in Computer Software  
Shahid Chamran University

February 2002

TRAVEL  
AWARDS

Travel Grant, RSS 2016, Ann Arbor, Michigan  
Colorado State University

June 2016

Travel Grant, IEEE CDC 2014, Los Angeles, California  
Colorado State University

December 2014

Travel Grant, RECOMB 2014, Pittsburgh, Pennsylvania  
Wayne State University

April 2014

RESEARCH  
INTERESTS

*Motion Planning, Nonlinear Dimensionality Reduction, Algorithmic Robotics, Computational Geometry, Machine Learning, and Soft Computing.*

SKILLS AND  
EXPERTISE

*Languages & Software:* C/C++, Java, Visual C++, Visual C#, OpenGL, CUDA, MATLAB, .NET, SQL, HTML, LaTeX, and MS Office.

*Platforms:* Windows, and Linux.

PUBLICATIONS  
(H-INDEX: 6)

- [1] R. Irajy and H. Chitsaz, "NUROA: A numerical roadmap algorithm," in *Decision and Control (CDC), IEEE 53rd Annual Conference on*, pp. 5359–5366, Dec 2014.
- [2] R. Ranjbaran, M. Goodarzi, R. Irajy, and M. Goodarzi, "Estimate DC characteristics of OPAMP with neural networks," in *Computer Modeling and Simulation (EMS), Fourth UKSim European Symposium on*, pp. 531–534, Nov 2010.
- [3] A. Nooraliei and R. Irajy, "Noise reduction and image sharpening using IJA cellular learning automaton," in *Computer Research and Development, Second International Conference on*, pp. 790–794, May 2010.
- [4] R. Irajy and M. T. Manzuri-Shalmani, "AMF: A novel reactive approach for motion planning of mobile robots in unknown dynamic environments," in *Robotics and Biomimetics (ROBIO), IEEE International Conference on*, pp. 1698–1703, Dec 2009.
- [5] A. Nooraliei and R. Irajy, "Robot path planning using wavefront approach with wall-following," in *Computer Science and Information Technology, 2nd IEEE International Conference on*, pp. 417–420, Aug 2009.
- [6] M. Naderan Tahan, R. Irajy, and M. T. Manzuri-Shalmani, "A real-time clearance-based approach for motion planning of mobile robots," in *Cognitive Informatics, 7th IEEE International Conference on*, pp. 394–401, Aug 2008.
- [7] A. H. Jamalain, R. Irajy, and M. T. Manzuri-Shalmani, "A learning automata-based method for estimating the mobility model of nodes in mobile ad-hoc networks," in *Cognitive Informatics, 7th IEEE International Conference on*, pp. 249–254, Aug 2008.

- [8] R. Iraj, M. T. Manzuri-Shalmani, A. H. Jamalian, and A. Sefidpour, "A real-time color-independent method for multiple faces tracking," in *Cognitive Informatics, 6th IEEE International Conference on*, pp. 99–105, Aug 2007.
- [9] A. H. Jamalian, R. Iraj, A. Sefidpour, and M. T. Manzuri-Shalmani, "Examining the  $\epsilon$ -optimality property of a tunable FSSA," in *Cognitive Informatics, 6th IEEE International Conference on*, pp. 169–177, Aug 2007.
- [10] A. H. Jamalian, A. Sefidpour, M. T. Manzuri-Shalmani, and R. Iraj, "SME: Learning automata-based algorithm for estimating the mobility model of soccer players," in *Cognitive Informatics, 6th IEEE International Conference on*, pp. 462–469, Aug 2007.
- [11] R. Iraj and M. Manzuri-Shalmani, "A new fuzzy-based spatial model for robot navigation among dynamic obstacles," in *Control and Automation, IEEE International Conference on*, pp. 1323–1328, May 2007.
- [12] R. Iraj, S. Hessabi, and E. K. Moghadam, "Accelerating the Rijndael algorithm using custom instructions capability of Nios II in ODYSSEY," in *Design and Test of Integrated Systems in Nanoscale Technology, International Conference on*, pp. 69–73, Sept 2006.
- [13] R. Iraj, M. T. Manzuri-Shalmani, A. H. Jamalian, and H. Beigy, "IJA automaton: Expediency and  $\epsilon$ -optimality properties," in *Cognitive Informatics, 5th IEEE International Conference on*, vol. 1, pp. 617–622, July 2006.
- [14] R. Iraj and H. Sarbazi-Azad, "A probability-based instruction combining method for scheduling in VLIW processors," in *Computer Systems and Applications, IEEE International Conference on*, pp. 673–679, March 2006.