Sajjad Torabian Esfahani

Current Position

M.Sc. Student, Computer Science, J.B. Speed School of Engineering, University of Louisville, Kentucky, United States

Contact Information

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Research Interests

Artificial Intelligence, Machine Learning, Robotics, Computer Vision, Computer Graphics, Signal Processing, Simulation and Modeling

Education

University of Louisville, KY, USA **January 2015 - Present**

M.Sc., Computer Science, Computer Engineering and Computer Science department

University of Tehran, Tehran, Iran **September 2009 - January 2015**

B.Sc., Computer Engineering, Department of Electrical and Computer Engineering

Rouzbeh High School **September 2005 - June 2009**

Diploma in Math and Physics

- ***GPA: 20 out of 20*** *(Ranked First of 47)*

Academic Experience

University of Louisville, KY, USA **Spring 2015 - Present**

Research Assistant, ***Cyber Security Laboratory*** *Supervisor: Dr. Roman Yampolskiy*

University of Louisville, KY, USA **July 2013 - September 2013**

Intern, ***Cyber Security Laboratory***

- *Worked on Audio CAPTCHAs, Supervisor: Dr. Roman V. Yampolskiy*
- *Selected for the CECS homepage spotlight: http://louisville.edu/speed/computer. The direct link is http://louisville.edu/speed/computer/spotlights/sajjad-torabian-esfahani-profile.html*

University of Tehran, Tehran, Iran **January 2013 - June 2013**

Teaching Assistant, ***Discrete Mathematics*** *Lecturer: Dr. Siamak Mohammadi*

University of Tehran, Tehran, Iran **January 2012 - June 2013**

Research Assistant, ***Artificial Intelligence and Robotics Laboratory*** *Supervisor: Dr. H. Moradi*

- *Worked on RoboCup, Computer Graphics, and Computer Vision*

University of Tehran, Tehran, Iran **January 2011 - June 2013**

Leader of the RoboCup team of University of Tehran

- *Worked on Nao robot, participated in competitions through the 3D Soccer Simulation League*

University of Tehran, Tehran, Iran **Fall 2009 - Fall 2011**

Leader of the Game Team of University of Tehran

- *Developed 3D games with Microsoft DirectX*
- *Taught DirectX and Computer Graphics concepts to undergraduate students, Spring 2011*

Teaching Experience

Discrete Mathematics, Rouzbeh Pre-University School	**Spring 2012**
Geometry, Rouzbeh High School	**Spring 2012**
Discrete Mathematics, Rouzbeh High School	**Fall 2011**
C++ Programming, Rouzbeh High School	**Fall 2011**
Introduction to Information Technology, Rouzbeh High School	**Fall 2009 - Spring 2011**

Honors & Awards

Merit Scholar Award, University of Louisville, equal to $12,000 per year, June 2014

The only undergraduate selected for an oral presentation, RSI International Conference on Robotics and Mechatronics (ICRoM 2013), Tehran, Iran, February 2013

Qualified for the 2013 **RoboCup World Championship** in Eindhoven, The Netherlands

- *Only 25 teams were selected through the qualification process, Spring 2013*

Qualified for the 2013 **IranOpen RoboCup Competitions**, Spring 2013

- *http://2013.iranopen.ir/Default.aspx?tabid=142&language=en-GB*

Awarded a scholarship worth $1000 from Alumni Association of Faculty of Engineering, University of Tehran, Spring 2013

Ranked 314th among more than 87,000 applicants in **National Universities Entrance Exam**, 2009

Ranked 1st of 47, Rouzbeh High School, 2008

Publications

S. Torabian, S. HoseinAlipour, A. Mirzargar, and M. Tavakkolian, "Improving the Localization of Humanoid Soccer Robots in Specified Fields: A Neural Network Approach", *RSI/ISM International Conference on Robotics and Mechatronics (ICRoM)*, Tehran, Iran, 2013

Workshops Organized

"International Internship," Student Scientific Research Center, **Tehran University of Medical Sciences**, Tehran, Iran, November 22, 2014 & December 20, 2014

Conferences Attended

RSI/ISM International Conference on Robotics and Mechatronics (ICRoM 2013), Tehran, Iran, 13 - 15 February 2013

18th International Conference on Computer Games: AI, Animation, Mobile, Education & Serious Games, Louisville, KY, US, 30th July - 1st August 2013

Workshops Attended

"Embedded Gaming," CGAMES 2013, Louisville, KY, US, Summer 2013

"Professional Techniques for Budget Game Development," CGAMES 2013, Louisville, KY, US, Summer 2013

Computer Skills

Programming Tools and Languages: C, C++, C#, Java, Python, Visual Basic, SQL, Assembly

Computer Graphics: Microsoft DirectX 11

Computer Vision: Open Source Computer Vision Library, OpenCV

HDL (Hardware Description Language): Verilog, VHDL

Simulation and Designing Tools: Matlab, Modelsim, Quartus

Sports

Second-rate certificate, Life Saving and Diving Federation, Tehran, Iran

Swimming Teacher at Manzariyeh Camp, Tehran, Iran, Summer 2009 & 2010 & 2011

Art & Concerts

Playing Santour (an Iranian traditional musical instrument) since Summer 2009

Presented and played Santour for the first time at **School of Music, University of Louisville**, Summer 2013

Concert at graduation ceremony of dentistry students of University of Tehran, Olympic Hotel, Tehran, Iran, Fall 2014

Santour Solo at Melody Baran Music School concert, Tehran, Iran, Spring 2012 & Fall 2012

Concert at Espandegan celebration, University of Science & Culture, Tehran, Iran, Spring 2013

Concert at Eidaneh celebration, University of Tehran, Tehran, Iran, Spring 2013

Languages

English: Fluent

Spanish: Intermediate (Follow me on www.duolingo.com/sajjadtorabian)

Arabic: Intermediate

Persian: Native Language

Other Interests

Masnavi, Theory of Music, Persian Music

References

Dr. Roman V. Yampolskiy, Associate Professor, J.B. Speed School of Engineering, University of Louisville, KY, US. Email: roman.yampolskiy@louisville.edu Tel: +1 502 852 3624

Dr. Siamak Mohammadi, Assistant Professor, School of Electrical & Computer Engineering, University of Tehran, Iran. Email: smohammadi@ut.ac.ir Tel: +98 21 82084935