

# Saeedeh Sadeghi

## Research Interests

- Cognitive Neuroscience
- Artificial Intelligence and Machine Learning

## Education

- 2012–Apr. 2015 **M.S. in Artificial Intelligence**, *University of Tehran*, Tehran, Iran, *GPA – 18.16/20*.
  - Thesis title: Metacognitive Ability in Substance Abusers
  - Advisors: Dr. Majid Nili Ahmadabadi and Dr. Bahador Bahrami (University College London)

2008–2012 **B.S. in Computer Engineering**, *Shiraz University*, Shiraz, Iran, *GPA: 18.46/20* (Class rank: 1 of 53).
  - 2009–2012, Shiraz University (transferred), Shiraz, *GPA – 18.53/20*
  - 2008–2009, Sharif University of Technology, Tehran, Iran *GPA – 17.88/20*

2004–2008 **Diploma in Physics and Mathematics Discipline**, *Farzanegan High School*, Affiliated with the National Organization for Development of Exceptional Talents (NODET), Shiraz, Iran, *GPA – 19.79/20* (Class rank: 1 of 18).

## Related Coursework

- **Graduate Courses:** Machine Learning, Pattern Recognition, Game Theory, Advanced Algorithm Design, System Identification, Social Networks Analysis, Bio-computing, Stochastic Processes
- **Coursera Online Courses:** [Introduction to Neuroeconomics: how the brain makes decisions \(2014\)](#), [Statistical Analysis of fMRI data \(2014\)](#), [Computational Neuroscience \(2014\)](#).
- **Auditing Course:** Principles of Cognitive Neuroscience (2013), [Institute for Cognitive Science Studies \(ICSS\)](#).

## Publications and Working Papers

### Working Papers

- S. Sadeghi, H. Ekhtiari, MN. Ahmadabadi, B. Bahrami, "**Metacognitive Deficiency for Perception But not Memory in Methadone Maintenance Patients**", [*submitted to Scientific Reports*]
- A. Shirvani, S. Sadeghi, P. Piray, B. Bahrami, MN. Ahmadabadi; "**Effect of Task Representation Medium on Performance in the Iowa Gambling Task**"

### Conference Presentations

- Nov. 2015 S. Sadeghi, A. Shirvani, P. Piray, B. Rafiee, B. Bahrami, MN. Ahmadabadi, **Effect of Task Representation Medium on Performance in the Iowa Gambling Task**, Poster Presentation, International Symposium on Prediction and Decision Making, Tokyo, Japan.
- Sep. 2015 S. Sadeghi, H. Ekhtiari, MN. Ahmadabadi, B. Bahrami, **Domain-Specific Impairment of Metacognitive Ability in Methadone Maintenance Patients**, Oral presentation. *9<sup>th</sup> International Addiction Science Congress (ASC2015)*, Tehran, Iran.
- Apr. 2015 S. Sadeghi, B. Bahrami, H. Ekhtiari and MN. Ahmadabadi, **Metacognitive Ability is Subject to Ego Depletion over Subsequent Tasks**, Poster presentation. *6<sup>th</sup> International Conference of Cognitive Science*, Tehran, Iran.

## Research and Academic Experience

- May 2015– May 2016 Non-resident researcher at [School of Cognitive Sciences](#), Institute for Research in Fundamental Sciences (IPM), Tehran. Mentor: Dr. M. Nili Ahmadabadi.
- Aug. 2015– Nov. 2015 Researcher at Computer Vision and Image Processing (CVIP) Lab, Shiraz University center for Traffic and Transportation studies, Shiraz. Mentor: Dr. Z. Azimifar.
- 2013–2015 Research Assistant at Cognitive Robotics Lab, University of Tehran.

#### 2010-2014 **Teaching Assistant:**

- Artificial Intelligence (Fall 2014), Dr. H. Moradi, University of Tehran.
- Machine Learning (Fall 2013), Dr. M. Nili Ahmadabadi, University of Tehran.
- Design And Analysis Of Algorithms (Spring 2011), Dr. Z. Azimifar, Shiraz University.
- Fundamentals of Programming (Python; Fall 2010), Dr. F. Khunjush, Shiraz University.

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## Selected Projects

- 2014-2016 Masters thesis project: Metacognitive ability in substance abusers.
- 2013-2015 Analysis of human decision making in the Iowa Gambling Task (IGT) using Reinforcement Learning models, Mentor: Dr. Majid Nili Ahmadabadi.
- 2014 Game theoretic analysis of a two-player group decision making perceptual task following the maximum confidence slating algorithm, Game Theory course project.
- 2011 Design and implementation of an intelligent ghost agent for the Pac-Man game. Implemented agent **Ranked 5<sup>th</sup>** in the "Ms Pac-Man vs Ghosts" IEEE competition of Essex university.
- 2010-2011 Design and implementation of an intelligent agent for the Dvonn board game. Implemented agent was a **Finalist** in **CodeCup** Annual Game Programming Competition.

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## Honors and Awards

- Fall 2016 **Fully funded PhD admission** to Virginia Tech interdisciplinary program in **Translational Biology, Medicine, and Health**.
- 2015 Winner of the **Ezama Diploma of Honor** in Recognition of Distinguished Research in the Field of Addiction Medicine, **9<sup>th</sup> International Conference on Addiction Science**, Tehran.
- 2014 **Research Grant** from Iranian Cognitive Sciences and Technologies Council.
- 2012-2014 **Grant for Graduate Studies** from the Iranian National Foundation of Elites.
- 2012 **Ranked 1<sup>st</sup>** in overall GPA among all 53 students of the 2008-2012 class of Computer Engineering (Software and Hardware) Program, Shiraz University.
- 2012 **7<sup>th</sup> Place** in Iranian National Computer Engineering Olympiad for University Students.
- 2010 **10<sup>th</sup> Place** in Asia Regional ACM Programming Contest, Tehran site, Iran.
- 2007 **Silver medal in National Student Chemistry Olympiad**, Young Scholars Club(YSC), Tehran.
- 2004 Selected for study in schools of **National Organization for Development of Exceptional Talents (NODET)** through an exam with less than 1% acceptance rate.

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## Talks and Workshops

- Sep. 2014 Presentation on *Metacognition and Addiction*, **International Congress on Addiction Science**, Tehran.
- May 2014 Lecture on *Modelling Decision Making in the Iowa Gambling Task*, Workshop on Cognitive Science and Cognitive Modeling, **Institute for Research in Fundamental Sciences (IPM)**, Tehran.

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## Skills

- Languages Persian (native), English (advanced), Arabic (Intermediate)
- Programming MATLAB, PYTHON, R, C, C++, JAVA, ASSEMBLY, SQL
- Web HTML, CSS, PHP, JavaScript

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## Test Scores

- Oct. 2014 **Toefl iBT: 106/120**; Reading(27/30), Listening(27/30), Speaking(26/30), Writing(26/30)
- Nov. 2015 **GRE General, Computer-Based**: Verbal (149; 41%), Quantitative (167; 94%), AW (4; 56%)