Kamyar Azizzadenesheli

University of California, Irvine
Electrical Engineering & Computer Science
4407, Engineering Hall
Irvine, CA, USA 92697-2625.

Phone: +1-(949)-690-9023.
Email: kazizzad@uci.edu
Homepage: https://sites.google.com/uci.edu/kazizzad

Current Research Interests

I am a graduate student in the MEGA DatA Lab at the University of California, Irvine, supervised by Prof. Anima Anandkumar. I work in machine learning, focusing on Spectral Method, Reinforcement Learning. I am broadly interested in Graphical models, latent variable models, Big Data, and Non-Convex optimization problems.

Education

Doctor of Philosophy in Electrical Engineering & Computer Science *Since Sept. 2014*
advised by Prof. Anima Anandkumar, Department of Electrical Engineering & Computer Science, University of California, Irvine, CA, USA.

Master of Science in Electrical Engineering & Computer Science *Dec. 2015*
advised by Prof. Anima Anandkumar, Department of Electrical Engineering & Computer Science, University of California, Irvine, CA, USA.

Bachelor of Science in Electrical Engineering *Jun. 2014*
advised by Prof. F. Ashtiani & Prof. F. Marvasti, Department of Electrical Engineering, Sharif University of Technology, Tehran, Iran.

Awards and Honors

- **EECS Department Fellowship**, University of California, Irvine, CA, USA, 2014.
- **Silver Medal** in International Olympiad in Astronomy & Astrophysics, Beijing, China, 2010.
- **Gold Medal** in National Olympiad in Astronomy & Astrophysics, Tehran, Iran, 2009.
- **First rank elite student** in National Elite Foundation, Iran, 2009-2014.
- **Second prize** in Sharif-Cup RoboCup Competition, Machine vision section, Tehran, Iran, 2012.

Research Experience

Recent Research (Machine Learning & Artificial Intelligence)

- Reinforcement Learning of Partially Observable environments using spectral methods
- Expectation-Maximization methods in planing of Markov Decision Processes
- Tensor Decomposition Methods & Non-Convex optimization.
- Multi-Linear Programming for planning in Partially Observable Environment

News

- Talk at "Interactive Learning" workshop, Simons Institute, UC Berkeley, CA, USA *(Feb, 2017)*
- Talk on "RL of Partially Observable Environment" Caltech, CA, USA *(Jan, 2017)*
- Long term visiting researcher at Simons Institute, UC Berkeley, CA, USA. *(Jan 2017-May 2017)*
- Guest Researcher at INRIA, France, *(2016)*
- Visiting Researcher at MSR, New York City, *(2016)*
- Visiting Researcher at MSR, New England, *(2016)*
- Talk at "Open Problem" Session, *Colombia University, (COLT), (June, 2016)*
- Talk at "Bandit and Reinforcement Learning" Session, *Colombia University, (COLT), (June, 2016)*
- Certified on "Topological Data Analysis" *NSF-CBMS, (June, 2016)*

Publication

- **K. Azizzadenesheli**, Alessandro Lazaric, Anima Anandkumar. Experimental paper: Reinforcement Learning of POMDPs using Spectral Methods, *Appeared at (NIPS workshop) 2016*
- **K. Azizzadenesheli**, Alessandro Lazaric, and Animashree Anandkumar. "Reinforcement Learning of Contextual MDPs using Spectral Methods." arXiv preprint arXiv:1611.03907 (2016).
- **K. Azizzadenesheli**, Alessandro Lazaric, Anima Anandkumar. Open Problem: Approximate Planning of POMDPs in the class of Memoryless Policies, *Appeared at Conference on Learning Theory (COLT) 2016*
- **K. Azizzadenesheli**, Alessandro Lazaric, Anima Anandkumar. Reinforcement Learning of POMDPs using Spectral Methods, *Appeared at Conference on Learning Theory (COLT) 2016*
- A.Najafi , **K.Azizzadenesheli**, F.Alimmarvasti, M.Ferdosizadeh Naeiny, Forward Interference Cancellation in Spectrally Efficient Frequency Division Multiplexing Systems, *International Symposium on Telecommunication 2014*

Graduate Courses

- Machine Learning, Computer Network, Probabilistic Learning, Linear Programming, Convex Optimization, Linear Algebra, Detection and Estimation, Advance Topics in Machine Learning, Artificial intelligence, Game Theory, Bayesian Analysis, Graphical Models, Scientific Computing, Algorithm Design, Data Network, Advanced Data Network.

Computer Skill

Matlab, C++, Assembly, LaTeX, Python, JavaScript, HTML, OpNet.