

Yash Satsangi

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Education

Ph.D. , Computer Science, University of Amsterdam, 2018.

Advisor: Shimon Whiteson

Thesis: Active Perception for Person Tracking

M.Sc. Electrical Engineering, Columbia University, 2012.

B.Tech. Electronics Engineering, NIT Nagpur, 2010.

Research Interest

Submodularity, Combinatorial Optimization, Bandit Algorithms, Reinforcement Learning, Information Theory, Decision-Theoretic Planning.

Publications

Journal Articles

Exploiting Submodular Value Functions for Scaling Up Active Perception, *Yash Satsangi, Shimon Whiteson, Frans A. Oliehoek, Matthijs T. J. Spaan* in *Autonomous Robots*, 2017.

Conference Proceedings

Real-Time Resource Allocation for Tracking Systems, *Yash Satsangi, Shimon Whiteson, Frans A. Oliehoek, Henri Bouma*, in Proceedings of the Thirty-Third Conference on Uncertainty in Artificial Intelligence (UAI), 2017.

Probably Approximately Correct Greedy Maximization with Efficient Bounds on Information Gain for Sensor Selection, *Yash Satsangi, Shimon Whiteson, Frans A. Oliehoek*, in Proceedings of the Twenty-Fifth International Joint Conference on Artificial Intelligence (IJCAI), 2016.

Probably Approximately Correct Greedy Maximization, *Yash Satsangi, Shimon Whiteson, Frans A. Oliehoek*, in Proceedings of the Fifteenth International Joint Conference on Autonomous Agents and Multi-Agent Systems (AAMAS), 2015.

Exploiting Submodular Value Functions for Faster Dynamic Sensor Selection, *Yash Satsangi, Shimon Whiteson, Frans A. Oliehoek*, in Proceedings of the Twenty-Ninth AAAI Conference on Artificial Intelligence (AAAI), 2015, In Shakey Celebration at IEEE International Conference on Robotics and Automation (ICRA), 2015, In Proceedings of Thirty-Second International Conference on Machine Learning (ICML), Workshop on Greedy is Great, 2015.

Technical Reports

An Analysis of Piecewise-Linear and Convex Value Function for Active Perception POMDPs., *Yash Satsangi, Shimon Whiteson, Mathijs T. J. Spaan*, Technical Report IAS-15-01, University of Amsterdam, October 2015.

Exploiting Submodular Value Functions for Faster Dynamic Sensor Selection: Extended Version, *Yash Satsangi, Shimon Whiteson, Frans A. Oliehoek*, Technical Report IAS-14-02, University of Amsterdam, December 2014.

Employment

TNO, Netherlands, Junior Researcher, June 2017 - Present.

University of Oxford, Visiting Researcher, September 2016 - April 2017.

Capital One Labs (acquired Bundle Inc.), Sr. Developer, February 2012 - February 2013.

eBay Inc., Intern, May 2011 - June 2011.

Teaching Experience

Student Supervised: Eugenio Bargiacchi, Master's Thesis: Dynamic Resource Allocation for Multi-Camera Systems, 2016.

Autonomous Agent, Teaching Assistant, University of Amsterdam, 2013, 2015.

Advanced Topics in Autonomous Agents, Teaching Assistant, University of Amsterdam, 2014.

Detection and Estimation Theory, Columbia University, 2012.

Professional Activities

Reviewer, Journal of Artificial Intelligence Research (JAIR).

Reviewer, Neural Information Processing Systems (NIPS) 2018.

Reviewer, International Conference on Machine Learning (ICML), 2015, 2016, 2018.

Reviewer, AAAI Conference on Artificial Intelligence (AAAI), 2017.

Reviewer, IEEE Conference on Decision and Control (CDC), 2017.

Editor, Amsterdam Science Magazine, 2014 - 2016.

Technical Skills

JAVA, Python, Matlab, R, MySQL, Hive, Hadoop, Tensorflow, Keras.