Maxim Egorov

4336 Howe Street
Oakland, CA 94611

🌐 www.maximegorov.com
 https://github.com/etotheipluspi
✉ maxgegorov@gmail.com

Education

2017	Stanford University, M.S., Aeronautics and Astronautics	GPA: 3.84/4.00
	Focus on Artificial Intelligence and Machine Learning	
2013	University of California, Berkeley, B.S. Physics	GPA: 3.86/4.00
	Highest Honors in Physics	

Experience

2017- Machine Learning Consultant, CureSeq Inc.
- Using deep learning to accelerate cancer drug discovery

2014-2017 Research Assistant, Stanford Intelligent Systems Lab
- Developed scalable algorithms for learning and decision making in multi-agent systems
- Mentored high-school and undergraduate students on machine learning projects
- Led lab meetings and literature reviews on deep learning and reinforcement learning

2014 Engineering Intern, Exa Corp.
- Built automation and modeling tools for computational fluid dynamic analysis

2011-2013 Research Assistant, Lawrence Berkeley National Lab
- Led the design, calibration and data analysis efforts for the NEXT neutrino detector

Selected Projects

POMDPs.jl: Algorithms for decision making under uncertainty in Julia — Github
- Creator and primary maintainer, issue tracking, algorithm development and implementation

MADRL: Multi-agent deep reinforcement learning in Python — Github
- Developed multi-agent extensions of popular deep reinforcement learning algorithms (DQN, TRPO, DDPG)

Chimp: Flexible deep reinforcement learning in Python — Github
- Developed a deep reinforcement learning framework that works with partially observable environments

Selected Publications

» J. Gupta, **M. Egorov**, and M. Kochenderfer, "Cooperative Multi-Agent Control Using Deep Reinforcement Learning", in *AAMAS Workshop on Adaptive Learning Agents*, 2017.

» **M. Egorov**, Z. Sunberg, E. Balaban, T. Wheeler, J. Gupta, and M. Kochenderfer, "POMDPs.jl: A framework for sequential decision making under uncertainty", *Journal of Machine Learning Research*, 2017.

» **M. Egorov**, M. Kochenderfer, and J. Uudmae, "Target Surveillance in Adversarial Environments Using POMDPs", in *AAAI Conference on Artificial Intelligence (AAAI)*, 2016.

Awards

Adaptive Learning Agents Best Paper Award, 2017	AHPCRC Best Student Project, 2016
UC Berkeley Laslett Scholarship, 2013	UC Berkeley William Glenn Homan Scholarship, 2013

Skills

Languages: C++, Python, Julia, Matlab.   **Tools:** git, shell, LaTeX.   **Tech:** TensorFlow, Theano, Scikit-learn.