ROSS GOROSHIN

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EDUCATION

New York University, New York, NY Ph.D. in Computer Science Adviser: Yann LeCun Primary Research: Unsupervised Deep Feature Learning in Computer Vision	2010 - 2015
Georgia Institute of Technology, Atlanta, GA M.S. in Electrical Engineering Adviser: Patricio Vela Masters Thesis: Obstacle Detection using a Monocular Camera	2006 - 2008
Concordia University, Montreal, QC B.Eng. in Electrical Engineering, Graduated with Distinction Capstone Project: "Realtime Visual Tracking System" 2 nd Place Winner	2002 - 2006
Vanier College, Montreal, QC Diploma of College Studies, Pure and Applied Science (Honors Program) Honor Roll 2002	2000 - 2002

EMPLOYMENT

Research Scientist – Google Brain, Montreal, Canada
July 2017 - Present
Research Scientist – Google DeepMind, London, United Kingdom
February 2016 - July 2017
Research areas: Deep Learning, unsupervised/reinforcement learning, computer vision
Research Engineer – NAVSEA/ONR, Panama City, FL
Full Time 2008 - 2010, Summer Intern 2011-2013
Naval Surface Warfare Center-Panama City Division, Computational Science Branch. Worked on Office
of Naval Research (ONR) sponsored projects in collaboration with academia.

JOURNAL PUBLICATIONS

• Ross Goroshin, Quyen Huynh, and Hao-Min Zhou. "Approximate solutions to several visibility optimization problems." Communications in Mathematical Sciences 9, no. 2 (2011).

CONFERENCES AND WORKSHOPS

- Mirowski, P., Pascanu, R., Viola, F., Soyer, H., Ballard, A., Banino, A., Denil, M., Goroshin, R., Sifre, L., Kavukcuoglu, K. and Kumaran, D., 2016. Learning to navigate in complex environments. arXiv preprint arXiv:1611.03673. *ICLR 2017, Conference*
- Goroshin, R., Mathieu, M.F. and LeCun, Y., 2015. Learning to linearize under uncertainty. In Advances in Neural Information Processing Systems (pp. 1234-1242). *NIPS 2015*
- Goroshin, R., Bruna, J., Tompson, J., Eigen, D. and LeCun, Y., 2015. Unsupervised learning of spatiotemporally coherent metrics. In Proceedings of the IEEE International Conference on Computer Vision (pp. 4086-4093). *ICCV 2015*
- Tompson, J., Goroshin, R., Jain, A., LeCun, Y. and Bregler, C., 2015. Efficient object localization using convolutional networks. In Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (pp. 648-656). *CVPR 2015*

- Zhao, J., Mathieu, M., Goroshin, R., and LeCun, Y. Stacked what-where autoencoders. arXiv preprint arXiv:1506.02351, 2015.
- Goroshin, R., Bruna, Szlam, A. J., Tompson, J., Eigen, D. and LeCun, Y. Unsupervised Feature Learning from Temporal Data, *Deep Learning Workshop*, *NIPS 2014*
- Ross Goroshin and Yann LeCun. "Saturating auto-encoders." arXiv:1301.3577. ICLR 2013, Conference
- Ross Goroshin. "Visibility Optimization using Variational Methods", SIAM Conference on Imaging Science 2010. Chicago, IL
- Jason C. Isaacs and Ross Goroshin. "Automated cable tracking in sonar imagery." In IEEE OCEANS 2010, pp. 1-7. Seattle, WA
- Jason C. Isaacs and Ross Goroshin. "Tracking cables in sonar and optical imagery." In Applied Imagery Pattern Recognition Workshop (AIPR), 2010 IEEE 39th, pp. 1-7. Washington, DC
- Jason C. Isaacs and Ross Goroshin. "Automated cable detection in sonar imagery." In Systems, Man and Cybernetics, 2009. IEEE International Conference, pp. 2745-2750. San Antonio, TX

INVITED TALKS, SYMPOSIUMS, AND SUMMER SCHOOLS

- Invited talk: "Unsupervised Feature Learning using Video" VASC Seminar, Robotics Institute, Carnegie Mellon University, November 2015
- Deep Learning Summer School, University of Montreal, August 2015
- Deep Learning and Feature Learning Graduate Summer School at The Institute for Pure and Applied Mathematics, UCLA, Los Angeles, California, July 2012
- Invited Talk: "Solutions to Visibility Optimization Problems using Variational Methods in a Level-Set Framework". Norbert Wiener Center for Harmonic Analysis, Department of Mathematics, University of Maryland, October 2009. College Park, Maryland
- Numerous Presentations for the DoD including Office of Naval Research (ONR) Review 2009, Arlington, VA

TECHNICAL

Research Areas	Unsupervised Learning, Deep/Machine Learning, Computer Vision,
	Dictionary Learning, Sparse Inference, Variational Methods,
	Level-Set Method, PDEs
Computer Languages	Python/TensorFlow, Lua/Torch7, Matlab, C++
Tools	Google Infrastructure, Git, Vim, LaTeX

PERSONAL

Hobbies	Cycling, Running, Badminton, SCUBA diving, Drawing
Languages	English, Russian (native), French (5 years)