New Frontiers for Deep Learning in Robotics
15th July, 2017, Boston, MI, U.S.A

Invited Speakers

Bayesian Deep Learning: Yarin Gal (University of Cambridge)
Learning to Navigate: Piotr Mirowski (DeepMind)
Generative Models for Reinforcement Learning: Pieter Abbeel (UC Berkeley/OpenAI)
Challenges of Embodied Deep Learning: Yann LeCun (Facebook, NYU)
Learning and Cognitive Robotics: Josh Tenenbaum (MIT) (tentative)
A Neuroscience Perspective on Deep Learning: Davix Cox (Harvard)
Generative Models: Aaron Courville (Université de Montréal)

Paper Submission Deadline
May 15, 2017 (anywhere on the planet)
Submit via e-mail to: deep-learning@roboticvision.org

Topics of interest comprise, but are not limited to:
scene understanding, semi-supervised learning, low-shot learning, weakly supervised learning in the presence of noisy and unreliable labels, Bayesian deep learning and the importance of uncertainty and reliable confidence measures, deep networks as a sensor, sensor fusion with deep networks, active learning, incremental learning, generative models and their potentials for scene understanding and semi-supervised learning, novel weakly supervised or unsupervised training regimes, domain adaptation and transfer learning, generative models for reinforcement learning, inverse reinforcement learning, learning from visual demonstration, reinforcement learning for hierarchical tasks, complex tasks, non-Markovian tasks, case studies: when does state-of-the-art deep learning fail in robotics?, success stories: where did deep learning enable breakthroughs in robotics?, utilizing robotic technology to create novel datasets comprising interaction, active vision etc., deep learning for embedded systems or platforms with limited computational power

Organizers
Dr Niko Sünderhauf, Dr Jürgen Leitner, Assoc Prof Michael Milford, Prof Peter Corke,
Australian Centre for Robotic Vision (ACRV), Queensland University of Technology (QUT)
Assoc Prof Pieter Abbeel, UC Berkeley, USA

http://tinyurl.com/robotdeeplearning