Ankesh Anand

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ankeshanand.com

Education

- **Mila, University of Montreal** — Montreal, Canada
  PhD in Machine Learning, supervised by Aaron Courville — *Fall 2017 - Present*
- **Indian Institute of Technology, Kharagpur** — Kharagpur, India
  Integrated M.Sc. in Mathematics and Computing — *2011 - 2016*

Publications

- **Unsupervised State Representation Learning in Atari** (arxiv)
  Ankesh Anand*, *Evan Racah**, *Sherjil Ozair**, *Yoshua Bengio, Marc Cote, Devon Hjelm*
  Neural Information Processing Systems (NeurIPS), 2019
- **Blindfold Baselines for Embodied QA** (arxiv)
  Ankesh Anand*, *Eugene Belilovsky, Kyle Kastner, Hugo Larochelle, Aaron Courville*
  ViGIL Workshop at Neural Information Processing Systems (NeurIPS), 2018
- **HoME: a Household Multimodal Environment** (arxiv)
  *Simon Brodeur, Ethan Perez**, ***Ankesh Anand****, *Florian Golemo**, *Luca Celotti, Florian Strub, Jean Rouat, Hugo Larochelle, Aaron Courville*
  International Conference on Learning Representations (ICLR) Workshop Track, 2018
- **We used Neural Networks to Detect Clickbaits: You won't believe what happened Next!** (arxiv)
  Ankesh Anand*, *Tanmoy Chakraborty, Noseong Park*
  European Conference on Information Retrieval (ECIR), 2017
- **MMGAN: Manifold Matching Generative Adversarial Networks** (arxiv)
  *Noseong Park, **Ankesh Anand**, Joel Ruben Antony Moniz, Kookjin Lee, Tanmoy Chakraborty, Jaegul Choo, Hongkyu Park, Youngmin Kim*
  International Conference on Pattern Recognition (ICPR), 2018

Work Experience

- **Microsoft Research** — Montreal, Canada
  Research Intern, Advisor: Philip Bachman — *Sept 2019-present*
  - Working on self-supervised learning for model-based RL.
- **Microsoft Research** — Montreal, Canada
  Research Intern, Advisor: Marc Cote, Devon Hjelm — *January-June 2019*
  - Worked on problems at the intersection of Reinforcement Learning and Representation Learning
  - The internship project led to a first-author publication at NeuRIPS'19: Unsupervised State Representation Learning in Atari

- **VISA Inc.** Bangalore, India
  Software Engineer *August 2016-August 2017*
  - Full stack development for the VISA Developer Platform

- **HackerEarth** Bangalore, India
  Backend Engineering Intern *May-July 2015*
  - Developed a new problem recommendation engine for HackerEarth, built resume parsing services and a real-time notification system for end-users.

- **Google Summer of Code** Remote
  Student Developer *May-August 2015*
  - Built an online analytics platform for BRL-CAD which provides aggregated analytics for logs and performance metrics collected across different machines and platforms.

- **Max Planck Institute for Software Systems** Kaiserslautern, Germany
  Visiting Scholar, Large Scale Internet Systems Group *May-July 2014*
  - Worked with an incubated startup named AirCloak to build tools for anonymized aggregated analytics using noise augmentation and selective filtering.

Projects

- **Contrastive Self-Supervised Learning for Model-Based RL**
  Advisors: Prof. Aaron Courville, Philip Bachman
  - Used contrastive self-supervised learning to build latent space dynamics models.
  - Preliminary experimental results show that self-supervised latent models are more sample efficient than existing state-of-the-art model-based RL methods.

Honors and Awards

- **Hult Prize, 2015:** Regional Finalist at the Hult Prize 2015 in Dubai: the worlds largest student competition for social entrepreneurship
- **Penn Apps, 2016**: Finalist at PennApps Spring 2016, America's largest collegiate hackathon.
- **Scholarships:** Recipient of the NTSE (National Talent Search Examination) scholarship (2009-11) awarded by NCERT, India and the INSPIRE Scholarship (2012-16) awarded by the Department of Science and Technology India.

Technical Skills

- **Programming Languages:**
  - **Proficient:** Python, JavaScript, C++
- **Machine Learning Libraries:** PyTorch, TensorFlow, scikit-learn, numpy, Pandas
- **Web Development:** Django, Flask, NodeJS, ReactJS, HTML5, CSS3, MySQL