Ankesh Anand

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Education

- **Montreal Institute for Learning Algorithms (MILA)** — 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

- **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 (part-time) — *December 2018-present*
  - Working on problems at the intersection of Reinforcement Learning and Representation Learning
- **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

- **Learning Generalized Representations for Zero-shot RL**
  Advisors: Prof. Aaron Courville, Hugo Larochelle
  - Used Domain Adversarial Learning to build state representations that are invariant to factors of variation that are not shared across tasks.
  - Preliminary experimental results show that such representations are able to generalize across instances of the SONIC game with different textures
- **Intrinsically motivated exploration via uncertainty-aware models**
  Advisors: Prof. Aaron Courville, Hugo Larochelle
  - Developed a novel exploration method that guides an agent's towards regions that lead to most reduction in it's model uncertainty
  - Preliminary results on delayed Mujoco tasks show that such an exploration bonus can outperform baselines and explore faster.

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.
- **Inter IIT Tech Meet, 2015:** Winner of the OpenSoft contest for developing an Android app that makes Information accessible to areas with low connectivity using Wifi P2P networks .
- **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++
  - **Intermediate:** Java, MATLAB
- **Machine Learning Libraries:** PyTorch, TensorFlow, scikit-learn, numpy, Pandas
- **Web Development:** Django, Flask, NodeJS, ReactJS, HTML5, CSS3, MySQL