# Ankesh Anand

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ankeshanand

## Education

- **Montreal Institute for Learning Algorithms (MILA)** — Montreal, Canada
  *PhD in Machine Learning* — *2017 - Present*
- **Indian Institute of Technology, Kharagpur** — Kharagpur, India
  *Integrated M.Sc. in Mathematics and Computing, CGPA (8.44/10)* — *2011 - 2016*

## Publications

- **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
- **FairScholar: Balancing Relevance and Diversity for Scientific Paper Recommendation**
  ***Ankesh Anand**, Tanmoy Chakraborty, Amitava Das*
  European Conference on Information Retrieval (ECIR), 2017

## Work Experience

- **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

- **Deep Neural Networks for Detecting Clickbaits**
  *Advisors: Prof. Noseong Park, UNC Charlotte*
  - Developed a Bi-directional LSTM architecture for detecting clickbaits using distributed word embeddings and character embeddings generated via 1-D Convolutional Neural Networks
  - Experimental results on a dataset of news headlines show that our model outperforms existing techniques for clickbait detection with an accuracy of 0.98 and ROC-AUC of 0.99
- **Adversarial Neural Cryptography in TensorFlow**
  *https://github.com/ankeshanand/neural-cryptography-tensorflow*
  - Published the first open-source Tensorflow implementation of the Adversarial Neural Cryptography paper by Google Brain.
  - Trained an Adversarial model based on Convolutional Neural Networks that allowed two neural networks to communicate secretly with each other in presence of an adversary.
- **Predicting Helpfulness of online Product Reviews**
  *Advisors: Prof. Pawan Goyal, IIT Kharagpur*
  - Used a combination of structural and semantic properties of text such as informativeness, readability, emotions etc. to predict helpfulness of online product reviews
  - Trained an LSTM based Recurrent Neural Network over word embeddings of reviews to further improve accuracy of prediction results

## 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:** Keras, TensorFlow, Theano, scikit-learn, NLTK, Pandas
- **Web Development:** Django, Flask, NodeJS, ReactJS, HTML5, CSS3, MySQL