AISHWARYA KAMATH

Email: aish@nyu.edu, Github: ashkamath, Website: ashkamath.github.io

RESEARCH INTERESTS

My research interests lie broadly in machine learning and its applications to natural language processing and computer vision. I am particularly interested in using information from multiple sources such as text, images, video and speech to improve commonsense reasoning capabilities of machines.

EDUCATION

New York University — United States
PhD Candidate, Data Science — *Sept 2019 - present*
– Focus: Natural language processing, multimodal understanding, commonsense reasoning
– Advisors: Professors Yann LeCun and Kyunghyun Cho

University of Massachusetts Amherst — United States
Master of Science, Computer Science - GPA: 3.9/4 — *Sept 2016 - May 2018*
– Focus: Natural language processing; structured prediction using indirect supervision
– Advisor: Professor Andrew McCallum

Manipal Institute of Technology — India
Bachelor of Technology, Electronics and Communication - GPA : 9.16/10 — *July 2012 - May 2016*

WORK EXPERIENCE

Google AI — United States
Research Intern — *June 2021 - August 2021*
Student Researcher — *September 2021 - November 2021*
– Mentors: Jason Baldridge, Zarana Parekh and Peter Anderson
– Grounded language understanding for Vision & Language Navigation

Facebook AI Research — United States
Research Intern — *June 2020 - August 2020*
– Mentors: Yann LeCun, Nicolas Carion
– End to end multimodal models for commonsense reasoning

Machine Learning Research Group, Oracle Labs — United States
Machine Learning Engineer, Data Science Team — *June 2018 - August 2019*
– Building domain specific NLP systems
– Providing machine learning solutions to internal product groups

Machine Learning Research Group, Oracle Labs — United States
Summer Intern, Research Team — *June 2017 - September 2017*
– Advisors: Jean-Baptiste Tristan and Michael Wick
– Worked on image classification to detect cervical cancer on real-world data obtained from medical clinics in Cameroon

TEACHING EXPERIENCE

New York University, CDS — United States
Teaching Assistant — *September 2020 - December 2020*
Deep Learning

African Masters in Machine Intelligence (AMMI)   Senegal (remote)
Teaching Assistant   *May 2021*
Deep Learning for Natural Language Processing

PUBLICATIONS

– **"MDETR - Modulated Detection for End-to-End Multi-Modal Understanding"**
Aishwarya Kamath, Mannat Singh, Yann LeCun, Ishan Misra, Gabriel Synnaeve, Nicolas Carion.
*International Conference on Computer Vision (ICCV) 2021. Selected for **oral presentation (top 3% of submitted papers)**.*

– **"AdapterFusion: Non-Destructive Task Composition for Transfer Learning"**
Jonas Pfeiffer, **Aishwarya Kamath**, Andreas Ruckle, Kyunghyun Cho, Iryna Gurevych.
*Selected for **oral presentation** at European Chapter of the ACL (EACL) 2021.*

– **"AdapterHub: A Framework for Adapting Transformers"**
Jonas Pfeiffer, Andreas Rckl, Clifton Poth, **Aishwarya Kamath**, Ivan Vulić, Sebastian Ruder, Kyunghyun Cho, Iryna Gurevych.
Empirical Methods in Natural Language Processing (EMNLP) 2020: Systems Demonstrations.

– **"What do Deep Networks Like to Read?"**
Jonas Pfeiffer*, **Aishwarya Kamath***, Sebastian Ruder.
Arxiv preprint, September 2019.

– **"Specializing Distributional Vectors of All Words for Lexical Entailment"**
Aishwarya Kamath*, Jonas Pfeiffer*, Edoardo M. Ponti, Goran Glavas, Ivan Vulić.
Best Paper Award at the *Representation Learning for NLP Workshop at ACL 2019.*

– **"A Survey on Semantic Parsing"**
Aishwarya Kamath, Rajarshi Das.
Conference on Automatic Knowledge Base Construction (AKBC) 2019.

– **"Training Structured Prediction Energy Networks with Indirect Supervision"**
Amirmohammad Rooshenas, **Aishwarya Kamath** and Andrew McCallum.
Selected for **oral presentation** at *NAACL-HLT 2018.*

AWARDS

– DeepMind Fellowship 2019-2020
– NYU Center for Data Science Fellowship 2019-2024
– NeurIPS 2019 Travel Award

ACADEMIC SERVICES

– Reviewer for NeurIPS 2019/20, AKBC 2019/21, EACL 2021, ICML 2021
– Program Committee member for EurNLP 2019, DeeLIO 2020/21, RepL4NLP 2021
– Instructor at the NYU AI school 2021

INVITED TALKS

– Intel Deep Learning CoP Talk Series	May 2021
– Google Image-Text group	June 2021
– UKP Lab, TU Darmstadt & CIS Lab Ludwig Maximilian University of Munich Joint Invited Talk Series	June 2021
– Microsoft Research Vision-and-Language Summer Research Talk Series	July 2021