Akshita Bhagia

https://akshitab.github.io

Natural Language Processing, Machine Learning, Deep Learning

EXPERIENCE

• Allen Institute for Artificial Intelligence (AI2)

Seattle, WA

Senior Research Engineer

Jul 2021 - Present

 $Research\ Engineer\ 2$

Jul 2020 - Jun 2021

Email: akshita23bhagia@gmail.com

Academic R&D in natural language processing (NLP). See list below for publications.

o Open Language Model (OLMo): Core contributions in dataset creation, model training, evaluation, and inference.

o Open-source libraries: OLMo, ai2-olmo-eval, wimbd, ai2-catwalk, allennlp, ai2-tailor

o Datasets: PALOMA, DOLMa, WMT22 African, No Language Left Behind (NLLB)

• Cerebellum Capital

Machine Learning Intern

San Francisco, CA

May 2019 - Aug 2019

o Adapted state-of-the-art deep learning models for financial time-series forecasting using Keras and Tensorflow.

• InFoCusp

Ahmedabad, India

Lead Platform Development Engineer Research Programmer Feb 2018 - Jun 2018 Jul 2015 - Jan 2018

• Engineered the core infrastructure of a data science platform used for R&D as well as production of financial models.

EDUCATION

University of Washington

Seattle, WA

Amherst, MA

Non-degree course enrollment (NLP for Cultural Analytics); GPA: 4.00/4.00

Jan 2023 - March 2023

University of Massachusetts, Amherst

Master of Science in Computer Science; GPA: 4.00/4.00

Sep 2018 - May 2020

Dhirubhai Ambani Institute of Information and Communication Technology

Bachelor of Technology in Information and Communication Technology; GPA: 8.95/10

Gandhinagar, India

Jul 2011 – May 2015

Relevant courses

NLP for Cultural Analytics, Machine Learning, Neural Networks, Deep Learning for NLP, Systems for Data Science, Advanced Algorithms

Publications

- Yanai Elazar, **Akshita Bhagia**, Ian Magnusson, Abhilasha Ravichander, Dustin Schwenk, Alane Suhr, Pete Walsh, and others. What's In My Big Data? *ICLR Spotlight* (2024).
- Dirk Groeneveld, Iz Beltagy, Pete Walsh, **Akshita Bhagia**, Rodney Kinney, Oyvind Tafjord, A. Jha, and others. OLMo: Accelerating the Science of Language Models. *ACL* (2024).
- Luca Soldaini[†], Rodney Kinney[†], Akshita Bhagia[†], Dustin Schwenk[†], David Atkinson, Russell Authur, Ben Bogin, and others. Dolma: an Open Corpus of Three Trillion Tokens for Language Model Pretraining Research. ACL (2024).
- Dirk Groeneveld, Anas Awadalla, Iz Beltagy, **Akshita Bhagia**, Ian Magnusson, Hao Peng, Oyvind Tafjord, Pete Walsh, Kyle Richardson, and Jesse Dodge. Catwalk: A Unified Language Model Evaluation Framework for Many Datasets. arXiv preprint (2023).

[†] denotes core contributors

- Hamish Ivison, **Akshita Bhagia**, Yizhong Wang, Hannaneh Hajishirzi, and Matthew Peters. HINT: Hypernetwork Instruction Tuning for Efficient Zero- and Few-Shot Generalisation. *ACL* (2023).
- Ian Magnusson, **Akshita Bhagia**, Valentin Hofmann, Luca Soldaini, A. Jha, Oyvind Tafjord, Dustin Schwenk, and others. Paloma: A Benchmark for Evaluating Language Model Fit. *In submission* (2023).
- Kyle Richardson, Ian Magnusson, Oyvind Tafjord, **Akshita Bhagia**, Iz Beltagy, Arman Cohan, Pradeep Dasigi, and others. Robust Tooling and New Resources for Large Language Model Evaluation via Catwalk (extended abstract). *GEM Workshop*, *EMNLP* (2023).
- Shruti Palaskar, Akshita Bhagia, Yonatan Bisk, Florian Metze, Alan W. Black, and Ana Marasović. On Advances in Text Generation from Images Beyond Captioning: A Case Study in Self-Rationalization. Findings of EMNLP (2022).
- Zhaofeng Wu, Robert L. Logan IV, Pete Walsh, **Akshita Bhagia**, Dirk Groeneveld, Sameer Singh, and Iz Beltagy. Continued Pretraining for Better Zero- and Few-Shot Promptability. *EMNLP* (2022).

ACADEMIC SERVICE AND OUTREACH

- o Reviewer for ACL-ARR (Feb 2024, Apr 2024).
- Reviewer for LREC-COLING (2024).
- Co-organizer for the 2022 WMT Shared Task on Large Scale Machine Translation Evaluation for African Languages.
- Co-organizer for AllenNLP Hacks 2021 hackathon for minoritized communities.
- Master's chair for the graduate chapter of UMass Amherst CSWomen (Feb 2019 May 2020); handled monthly
 travel grants. The organization was awarded a Women for UMass grant towards travel expenses for graduate
 students.
- o Grader for Programming with Data Structures (Fall 2018), Neural Networks (Fall 2019).
- Student Representative of the Gender Cell at DA-IICT (2014-2015).

Talks and Panels

- Presenter on the Databricks webinar for the OLMo project (March 2024).
- Interviewed by Sam Charrington on the TWiML podcast about the OLMo project (March 2024).
- Workshop on the AllenNLP library at AllenNLP Hacks 2021.
- Workshop on Running experiments on Google Colaboratory at AllenNLP Hacks 2021.
- $\circ\,$ Panelist on the GHC Information Panel at UMass CICS in Spring 2020.

AWARDS

- o Geekwire Innovation of the Year 2024 Award for OLMo.
- Recipient of the AnitaB.org Grace Hopper Conference Scholarship 2019.

Mentoring

- o Pranjali Basmatkar, Research Engineering Intern @ AI2 (Summer 2023).
- Sunitha Selvan, Research Engineering Intern @ AI2 (Summer 2022).
- o Arjun Subramonian, Research Engineering Intern @ AI2 AI2 Intern of the Year (Summer 2021).
- o Subhodeep Maji, Research Programmer Intern @ InFoCusp (Spring 2017).