

Ayush Maheshwari

PhD Candidate (Final Year), IIT Bombay (India)

✉ ayusham@cse.iitb.ac.in • 🌐 ayushbits.github.io • in ayushx
📷 Ayush • 🔄 ayushbits

Education

Indian Institute of Technology Bombay <i>Ph.D. (CSE), Recipient of Ekal Fellowship</i> <i>Advisors: Prof. Ganesh Ramakrishnan & Prof. Manjesh K. Hanawal</i>	Mumbai, India 2019–Present
Tata Institute of Social Sciences <i>M.Sc.</i>	Mumbai, India 2013–2015
University College of Engineering <i>B.Tech. (CSE)</i>	Rajasthan Technical University Kota, India 2007–2011

Research Interests

- Develop machine learning based methods that generalize to new domains with limited resources.
- Lexically constrained neural machine translation
- Data programming, semi-supervised learning, subset selection

Experience

Adobe Research <i>Research Intern, Document Cloud Team</i>	Bengaluru May 2021 – Aug 2021
NCETIS, IIT Bombay <i>Project Engineer</i>	Mumbai 2016–2018
Water & Climate Lab, IIT Gandhinagar <i>Junior Research Fellow</i>	2015–2016
Tata Consultancy Services <i>Systems Engineer</i>	Mumbai 2011–2013

Open-Source contributions

- **SPEAR** : Data-Programming python library to create training data. [Repo link](#)
- **UDAAN** : Post-editing workbench to quickly create publishable translations. [Website](#)

Computer Skills

Programming Languages: Python, C, C++, Javascript/jQuery, Bash, SQL

Libraries: PyTorch, NumPy, scikit-learn

Applications: \LaTeX , Google Cloud Platform

Featured Publications

1. **Adaptive mixing of auxiliary losses in supervised learning**
Sivasubramanian D., **Maheshwari, A.**, Prathosh AP, Shenoy P., Ramakrishnan G.
AAAI, 2023 ([Oral Presentation](#))
2. **UDAAN-Machine Learning based Post-Editing tool for Document Translation**,
Maheshwari, A., R. Ajay., Subramanian V., Ramakrishnan G.
CODS-COMAD Demonstrations, 2023 ([Best Demo Paper Award](#))
3. **Learning to Robustly Aggregate Labeling Functions for Semi-supervised Data Programming**
Maheshwari, A., Killamsetty K., Ramakrishnan G., Iyer R., Danilevsky M., & Popa L.
Findings of ACL, 2022
4. **Data Programming using Semi-Supervision and Subset Selection**
Maheshwari, A., Chatterjee O., Killamsetty K., Iyer R., & Ramakrishnan G.
Findings of ACL, 2021
5. **Joint Learning of Hyperbolic Label Embeddings for Hierarchical Multi-label Classification**
Maheshwari A., Chatterjee S., Ramakrishnan, G. & Jagaralpudi S.
EACL, 2021
6. **DynGAN: Generative Adversarial Networks for Dynamic Network Embedding**
Maheshwari, A., Goyal, A., Hanawal, M., & Ramakrishnan, G.
In Graph Representation Learning Workshop at NeurIPS 2019.

Awards & Services

- Best Demo Paper Award in CODS-COMAD 2023
- Awarded prestigious Ekal Fellowship 2020
- Reviewer: ARR 21,22, EMNLP 22, ACL 21,22, AAAI 22, EACL 19
- Travel Grant for attending EMNLP 2022, Abu Dhabi
- Co-Founder at [Temples of India](#) - A web and app platform listing > 690,000 temples across Indian subcontinent.
- Key Member of [Udaan Project](#) - A project to translate education textbooks in Indian languages.

Talks

- SPEAR: Data Programming using Semi-Supervision [\[Talk\]](#)
Presented at DECILE WORKSHOP, 2022
- Representation Learning on Graphs
Presented at IIIT Hyderabad, 2018