

ADITI CHAUDHARY

EMAIL: aschaudh@andrew.cmu.edu

WEB: <https://cs.cmu.edu/~aschaudh>

EDUCATION

- 2017-Present **M.S. + Ph.D. in Language Technologies**
Carnegie Mellon University, Pittsburgh PA, USA
- 2010-2015 **B.E. (Hons). Computer Science,**
Birla Institute of Technology and Science, Pilani, India
- 2010-2015 **MSc. (Hons). Biological Sciences**
Birla Institute of Technology and Science, Pilani, India

WORK EXPERIENCE

- Aug 2017 - Present **Graduate Research Assistant,** Advisor: Graham Neubig
Carnegie Mellon University, Pittsburgh, PA, USA
Work on automatically extracting and visualizing language descriptions for *all* languages, including the under-resourced languages, for the purpose of language learning and documentation.
- May 2021 - Aug 2021 **Research Intern,** Supervisor: Partha Talukdar
Google Research, Bengaluru, India
Work on injecting temporal knowledge in pretrained language models. Further, proposed a recipe to also adapt it to the multilingual settings.
- May 2020 - Aug 2020 **Research Intern,** Supervisor: Karthik Raman
Google Research, Mountain View, CA, USA
Work on exploring alternate objectives for multilingual pre-training. Specifically, use bi-lingual dictionaries to implicitly align token representations across languages.
- Jul 2015 - Jul 2017 **Software Engineer,** Supervisor: Gaurav Khandelwal
Microsoft India Development Center, Hyderabad, India
Work on Bing Search Experiences, specifically developed the Travel Segment. Work on a research project for extending question-answering for code-mixed languages.
- Jan 2015 - Jul 2015 **Software Engineering Intern,** Supervisor: Dinesh Pai
WalmartLabs, Bengaluru, India
Work on JAVA RESTful services for Global Logistics System that manages distribution centers.
- May 2014 - Jul 2014 **Research Intern,** Supervisor: Supratim Ray
Indian Institute of Sciences, Bengaluru, India
Work on electroencephalogram source localization for reconstructing brain activity.

PUBLICATIONS

- 2021 **When is Wall a Pared and when a Muro?:Extracting Rules Governing Lexical Selection**
Proceedings of EMNLP 2021
Aditi Chaudhary, Kayo Yin, Antonios Anastasopoulos, Graham Neubig
<https://aclanthology.org/2021.emnlp-main.553.pdf>
- 2021 **Evaluating the Morphosyntactic Well-formedness of Generated Texts**
Proceedings of EMNLP 2021
Adithya Pratapa, Antonios Anastasopoulos, Shruti Rijhwani, **Aditi Chaudhary**, David R. Mortensen, Graham Neubig and Yulia Tsvetkov
<https://aclanthology.org/2021.emnlp-main.570.pdf>
- 2021 **Reducing Confusion in Active Learning for Part-Of-Speech Tagging**
Proceedings of TACL 2021
Aditi Chaudhary, Antonios Anastasopoulos, Zaid Sheikh, Graham Neubig
https://doi.org/10.1162/tacl_a_00350
- 2021 **Do Context-Aware Translation Models Pay the Right Attention?**
Proceedings of ACL 2021
Kayo Yin, Patrick Fernandes, Danish Pruthi, **Aditi Chaudhary**, Andre F. T. Martins, Graham Neubig
<https://aclanthology.org/2021.acl-long.65.pdf>
- 2020 **DICT-MLM: Improved Multilingual Pre-Training using Bilingual Dictionaries**
arXiv pre-print
Aditi Chaudhary, Karthik Raman, Krishna Srinivasan, Jiecao Chen
<https://arxiv.org/abs/2010.12566>
- 2020 **Automatic Extraction of Rules Governing Morphological Agreement**
Proceedings of EMNLP 2020
Aditi Chaudhary, Antonios Anastasopoulos, Adithya Pratapa, David R. Mortensen, Zaid Sheikh, Yulia Tsvetkov, Graham Neubig
<https://www.aclweb.org/anthology/2020.emnlp-main.422.pdf>
- 2020 **SIGTYP 2020 Shared Task: Prediction of Typological Features**
Proceedings of EMNLP 2020
Johannes Bjerva, Elizabeth Salesky, Sabrina J. Mielke, **Aditi Chaudhary**, Giuseppe G. A. Celano, Edoardo M. Ponti, Ekaterina Vylomova, Ryan Cotterell, Isabelle Augenstein
<https://www.aclweb.org/anthology/2020.sigtyp-1.1.pdf>
- 2020 **Exploring neural architectures and techniques for typologically diverse morphological inflection**
Proceedings of SIGMORPHON 2020
Pratik Jayarao, Siddhanth Pillay, Pranav Thombre, **Aditi Chaudhary**
<https://www.aclweb.org/anthology/2020.sigmorphon-1.14.pdf>

- 2020 **A Summary of the First Workshop on Language Technology for Language Documentation and Revitalization**
Proceedings of the SLTU and CCURL Workshop 2020
Graham Neubig, Shruti Rijhwani, Alexis Palmer, Jordan MacKenzie, Hilaria Cruz, Xinjian Li, Matthew Lee, **Aditi Chaudhary**, Luke Gessler, Steven Abney, Shirley Anugrah Hayati, Antonios Anastasopoulos, Olga Zamaraeva, Emily Prud'hommeaux, Jennette Child, Sara Child, Rebecca Knowles, Sarah Moeller, Jeffrey Micher, Yiyuan Li, Sydney Zink, Mengzhou Xia, Roshan S Sharma, Patrick Littell.
<https://www.aclweb.org/anthology/2020.sltu-1.48.pdf>
- 2019 **A Little Annotation does a Lot of Good: A Study in Bootstrapping Low-resource Named Entity Recognizers**
Proceedings of EMNLP 2019
Aditi Chaudhary, Jiateng Xie, Zaid Sheikh, Graham Neubig, Jaime Carbonell
<https://www.aclweb.org/anthology/D19-1520.pdf>
- 2019 **What a Sunny Day: Towards Emoji-Sensitive Irony Detection**
Proceedings of W-NUT 2019
Aditi Chaudhary, Shirley Anugrah Hayati, Naoki Otani, Alan Black
<https://www.aclweb.org/anthology/D19-55.pdf#page=232>
- 2019 **Dr.Quad at MEDIQA 2019: Towards Textual Inference and Question Entailment using contextualized representations**
Proceedings of MEDIQA 2019
Vinayshekhar Bannihatti Kumar, Ashwin Srinivasan, **Aditi Chaudhary**, James Route, Teruko Mitamura, Eric Nyberg
<http://arxiv.org/abs/1907.10136>
- 2018 **Adapting Word Embeddings to New Languages with Morphological and Phonological Subword Representations**
Proceedings of EMNLP 2018
Aditi Chaudhary, Chunting Zhou, Lori Levin, Graham Neubig, David Mortensen, Jaime Carbonell
<https://www.aclweb.org/anthology/D18-1366.pdf>

ACADEMIC MENTORSHIP

- **Project:** Exploring neural architectures and techniques for typologically diverse morphological inflection
MS Students: Pratik Jayarao, Siddhanth Pillay, Pranav Thombre
- **Project:** Multi-dimensional Zero-shot Transfer Learning for Named Entity Recognition
MS Students: Aman Madaan, Tanmay Parekh, Amrith Setlur
- **Project:** Exploring Dependency Parsing for Sanskrit
Undergraduate Student: Roshan Sharma

TEACHING AND LEADERSHIP EXPERIENCE

- **Organizer**, Workshop on Computational Methods for Endangered Languages, ComputEL-5 @ ACL 2022
- **Organizer and mentor**, Graduate Application Support Program Carnegie Mellon University, Pittsburgh PA, USA (2020, 2021)
- **Organizer**, Shared Task on Prediction of Typological Features SIGTYP @ EMNLP 2020
- **Teaching Assistant**, CS 11-747 Neural Networks for NLP Carnegie Mellon University, Pittsburgh PA, USA (Jan 2020 – May 2020)
- **Teaching Assistant**, MSIT eBIZ – Search Engine Optimization and Data Mining Carnegie Mellon University, Pittsburgh PA, USA (Mar 2018 – May 2020)
- **Reviewer**, EMNLP 2019, NAACL 2019, ACL 2020, ACL-SRW 2020, EMNLP 2020, ACL-SRW 2021, ACL 2021, ARR 2022
- **Volunteer**, North American Summer School in Logic, Language and Information, NASSILLI 2018 Carnegie Mellon University, Pittsburgh PA, USA
- **Captain**, Table-Tennis Birla Institute of Technology and Science, Pilani, India (Aug 2011 – Aug 2012)
- **Joint Secretary**, Maharashtra Cultural Association Birla Institute of Technology and Science, Pilani, India (Aug 2011 – Aug 2012)

TECHNICAL SKILLS

Programming Languages: Python, C++, Java, C#, C, Matlab, SCOPE, SQL, JavaScript, CSS, HTML

Frameworks and Tools: PyTorch, DyNet, TensorFlow, Microsoft Bot Framework, Android SDK, Git, Spring, Hibernate

AWARDS

2020 - 2022	Waibel Presidential Scholarship
2019 - 2020	Dr. Robert D. Sansom Fellowship
2019	Interpretability Award @ SIGMORPHON, ACL 2019
2019	Best Presentation Award, Student Research Symposium at Carnegie Mellon University