

Prathyusha Jwalapuram

CONTACT INFORMATION 27 Foch Road, (+65) 94681446
#09-01 Hoa Nam Building, pjwalapuram@gmail.com
Singapore - 209264 http://www.pjwalapuram.com

EDUCATION **Nanyang Technological University, Singapore**
Ph.D., Computer Science July 2018 - August 2022
Thesis: Building Generalizable Models for Discourse Phenomena Evaluation and Machine Translation

International Institute of Information Technology, Hyderabad
MS, Computational Linguistics 2012-2018 (dual degree with Honors)
B.Tech, Computer Science

PUBLICATIONS **Jwalapuram, Prathyusha.** “Pulling Out All the Full Stops: Punctuation Sensitivity in Neural Machine Translation and Evaluation.” *Findings of ACL* (2023).

Jwalapuram, Prathyusha, Joty, Shafiq and Lin, Xiang. “Rethinking Self-Supervision Objectives for Generalizable Coherence Modeling.” *ACL* (2022).

Mohiuddin, Tasnim* and **Jwalapuram, Prathyusha*** and Lin Xiang* and Joty, Shafiq*. “Rethinking Coherence Modeling: Synthetic vs. Downstream Tasks.” *EACL* (2021).

Jwalapuram, Prathyusha and Joty, Shafiq and Shen, Youlin. “Pronoun-Targeted Finetuning for NMT with Hybrid Losses.” *EMNLP* (2020).

Bari, M Saiful and Joty, Shafiq and **Jwalapuram, Prathyusha.** “Zero-Resource Cross-Lingual Named Entity Recognition.” *AAAI* (2020).

Jwalapuram, Prathyusha and Joty, Shafiq and Temnikova, Irina and Nakov, Preslav. “Evaluating Pronominal Anaphora in Machine Translation: An Evaluation Measure and a Test Suite.” *EMNLP-IJCNLP* (2019).

Lin, Xiang and Joty, Shafiq and **Jwalapuram, Prathyusha** and Bari, M Saiful. “A Unified Linear-Time Framework for Sentence-Level Discourse Parsing.” *ACL* (2019).

OTHER PROJECTS Lin, Xiang, **Jwalapuram, Prathyusha,** and Joty, Shafiq. “Dynamic Scheduled Sampling with Imitation Loss for Neural Text Generation.” Under review.

Jwalapuram, Prathyusha and Rychalska, Barbara and Joty, Shafiq and Basaj, Dominika. “Can Your Context-Aware MT System Pass the DiP Benchmark Tests? : Evaluation Benchmarks for Discourse Phenomena in Machine Translation.” arXiv abs/2004.14607 (2020).

WORK
EXPERIENCE

Applied Scientist
Salesforce

July 2024 - Present

Research Scientist
Rakuten Asia
Machine Translation and Evaluation Lead

August 2022 - July 2024

- Improved the English-Japanese Machine Translation system by making effective use of available data while streamlining stopgap solutions and maintaining inference efficiency for production.
- Built a comprehensive test suite and evaluation framework for machine translation, to drive model improvement across several axes. Led the adoption of COMET, a model-based evaluation metric, over traditional string matching based BLEU scores.
- Composed evaluation test suites and drafted annotation guidelines for data collection and human evaluation for large language models across languages based on state-of-the-art principles.
- Discovered a critical issue with punctuation robustness in commercial machine translation systems (Google/DeepL/Microsoft). Led to a publication accepted at ACL Findings 2023 as a solo author.

ACADEMIC
EXPERIENCE

Program Committee
ACL 2019-2023, EMNLP 2019-2023, NAACL 2020-2021, AAAI 2020-2022, EACL 2020, ACL Rolling Review

Teaching Assistant (NTU)
Deep Learning for NLP, Object Oriented Design and Programming, Multi-Disciplinary Project, Data Structures

Teaching Assistant (IIIT-H)
Introduction to Linguistics, Linguistics-I

HONORS &
AWARDS

Dean's List
IIIT-H, Monsoon 2016, 2015

Merit List
IIIT-H, Monsoon 2014

ADDITIONAL
EXPERIENCE

Panel Member
WiNLP Stories from Asia Panel at ACL-IJCNLP 2021

Student Co-Chair
Diversity & Inclusion Committee, NAACL 2021

Student Co-Chair
Diversity & Inclusion Committee, EMNLP 2020

Co-Curator
TEDxNTU 2018-2020