Saujas Vaduguru

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Education

2022–present	**Ph.D. in Language and Information Technologies** *Language Technologies Institute, School of Computer Science, Carnegie Mellon University* Advisor: Daniel Fried
2017–2022	**B.Tech. in Computer Science** and **M.S. (by Research) in Computational Linguistics** *International Institute of Information Technology (IIIT), Hyderabad* Advisors: Monojit Choudhury, Dipti Misra Sharma Thesis: Program Synthesis for Linguistic Rules

Former Positions

2019–2022	**Research Assistant**, Language Technologies Research Center, *IIIT, Hyderabad*
May–Aug 2021	**Research Intern**, Chandar Research Lab, *Mila* Mentors: Sarath Chandar, Prasanna Parthasarathi

Publications

[8] ***Generating Pragmatic Examples to Train Neural Program Synthesizers***
Saujas Vaduguru, Daniel Fried, Yewen Pu
Twelfth International Conference on Learning Representations (ICLR), 2024

[7] ***Amortizing Pragmatic Program Synthesis with Rankings***
Yewen Pu, **Saujas Vaduguru**, Priyan Vaithilingam, Elena Glassman, Daniel Fried
arXiv preprint

[6] ***Symbolic Planning and Code Generation for Grounded Dialogue***
Justin Chiu, Wenting Zhao, Derek Chen, **Saujas Vaduguru**, Alexander Rush, Daniel Fried
Conference on Empirical Methods in Natural Language Processing (EMNLP), 2023

[5] ***Adapting to Gradual Distribution Shifts with Continual Weight Averaging***
Jared Fernandez, **Saujas Vaduguru**, Sanket Vaibhav Mehta, Yonatan Bisk, Emma Strubell
Poster presented at *Workshop on High-dimensional Learning Dynamics*
40th International Conference on Machine Learning (ICML), 2023

[4] ***Probing Negation in Language Models***
Shashwat Singh, Shashwat Goel, **Saujas Vaduguru**, Ponnurangam Kumaraguru
Poster presented at the *8th Workshop on Representation Learning for NLP (RepL4NLP)*
61st Annual Meeting of the Association for Computational Linguistics (ACL), 2023

[3] ***Stress Rules from Surface Forms: Experiments with Program Synthesis***
Saujas Vaduguru, Partho Sarthi, Monojit Choudhury, and Dipti Sharma
International Conference on Natural Language Processing (ICON), 2021

last updated: January 29, 2024

[2] *Efficient Pragmatic Program Synthesis with Informative Specifications*
Saujas Vaduguru, Kevin Ellis, Yewen Pu
Contributed talk at *Workshop on Meaning in Context: Pragmatic Communication in Humans and Machines, 35th Conference on Neural Information Processing Systems (NeurIPS), 2021*

[1] *Sample-efficient linguistic generalizations through program synthesis: Experiments with phonology problems*
Saujas Vaduguru, Aalok Sathe, Monojit Choudhury, and Dipti Sharma
Proceedings of the 18th SIGMORPHON Workshop on Computational Research in Phonetics, Phonology, and Morphology
The Joint Conference of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing (ACL-IJCNLP), 2021

Honors and Awards

2021   Mitacs Globalink Research Internship

2017–2021   Dean's List Award for Academic Performance, *IIIT, Hyderabad*

2015   Honourable Mention, *International Linguistics Olympiad*

Academic Service

Organizer: First Workshop on Theory of Mind at ICML 2023

Reviewer: EMNLP 2023, ACL 2023, BlackboxNLP@EMNLP 2023, NILLI@EMNLP 2021, ICON 2021

Teaching Experience

Fall 2023   **Teaching Assistant**, Advanced Natural Language Processing, *Carnegie Mellon University*

Spring 2020 **Teaching Assistant**, Computational Linguistics I, *IIIT, Hyderabad*

Invited Talks

Fall 2023   Program synthesis from informative examples, *CMU Software Research Seminar*

Outreach

Pāṇini Linguistics Olympiad

- Closely involved with the Indian national Linguistics Olympiad
- Member of the Problem Committee (2022–)
- Member of the Organizing Committee for the program from 2018–2022
- Co-chair of Problem Committee and Jury (2018–2021)
- Team leader and coach for Indian team at the International Linguistics Olympiad in 2018, 2019, and 2021
- Lecturer at Joint Asian-Pacific Linguistics Training, 2021–22