




# Saujas Vaduguru

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 <https://github.com/saujasv>

## 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  
Under review at the *12th International Conference on Learning Representations (ICLR)*, 2024
- [7] *Amortizing Pragmatic Program Synthesis with Rankings*  
Yewen Pu, **Saujas Vaduguru**, Priyan Vaithilingam, Elena Glassman, Daniel Fried  
Under review at the *38th Annual AAAI Conference on Artificial Intelligence (AAAI)*, 2024
- [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

- [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