

# 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
- Developed program synthesis methods to infer phonological rules from a small number of examples
  - Designed various domain-specific languages to compare impact of specifying linguistic knowledge explicitly
- SKILLS: C#, Python, Microsoft PROSE SDK
- May–Aug  
2021 **Research Intern**, Chandar Research Lab, MILA
- MENTORS: Sarath Chandar, Prasanna Parthasarathi
- Explored slot-incremental continual learning set-ups in dialogue state tracking (DST)
  - Finetuned Transformer-based models for DST using various continual learning algorithms
- SKILLS: Python, PyTorch, HuggingFace Transformers

## Publications

- [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  
*Workshop on Meaning in Context: Pragmatic Communication in Humans and Machines*  
*35th Conference on Neural Information Processing Systems (NeurIPS), 2021*  
*(oral presentation)*
- [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
2015	Honourable Mention, International Linguistics Olympiad

## Academic Service

REVIEWER: ICON 2021, NILLI@EMNLP 2021

## Teaching Experience

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

## Outreach

### Pāṇini Linguistics Olympiad

- Co-chair of Problem Committee and Jury, and member of the Organizing Committee for the Indian national Linguistics Olympiad program from 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