# Saujas Vaduguru

https://saujasv.github.io
svadugur@andrew.cmu.edu
https://github.com/saujasv

#### Education

Starting

Ph.D. in Language and Information Technologies

2022

Language Technologies Institute, School of Computer Science, Carnegie Mellon University

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 learn rules for phonological stress placement 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

last updated: July 3, 2022

## 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

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