KALINA KOSTYSZYN

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EDUCATION

Ph.D. Linguistics, expected graduation Aug. 2024, Stony Brook University (SBU).
Advisor: Jeffrey Heinz
Advanced Graduate Certificate in Data and Computational Science
Advanced Graduate Certificate in Human-Centered Data Science

B.A. Dual degree in Computer Science and Linguistics, 2017, Bryn Mawr College (BMC)
Advisors: Deepak Kumar and Jane Chandlee

FELLOWSHIPS AND AFFILIATIONS

Funded Fellow 2022 - current; National Science Foundation (NSF) Research Traineeship
"Detecting and Addressing Bias in Data, Humans, and Institutions"
Inaugural cohort in convergent research traineeship for human-centered AI.
Lead role in Post-Conviction Project in collaboration with
Innocence Network Organizations, analyzing wrongful convictions using
transparent, data-driven methods.

Affiliated student 2018 - current; Institute for Advanced Computational Science (SBU)
2018 - current; Institute for AI-Driven Discovery and Innovation (SBU)

SELECTED PUBLICATIONS AND PRESENTATIONS

Kalina Kostyszyn, Carl J. Wiedemann, Rosa Bermejo, Amie Paige, Kristen W. Kalb-DellaRatta, & Susan E. Brennan (2024) "A Computational Decision-Tree Approach to Inform Post-Conviction Intake Decisions." The Wrongful Conviction Law Review: Vol. 5, Issue 1.

Grace Wivell, Veronica Miatto, Ayla Karakas, **Kalina Kostyszyn**, Lori Repetti."All About Ablaut: A Typology of Ablaut Reduplicative Structures." Linguistic Typology. Forthcoming.

Sam van der Poel, Dakotah Lambert, **Kalina Kostyszyn**, Tiantian Gao, Rahul Verma, Derek Anderson, Joanne Chau, Emily Peterson, Cody St. Clair, Paul Fodor, Chihiro Shibata, and Jeffrey Heinz. "MLRegTest: A Benchmark for the Machine Learning of Regular Languages." Forthcoming. https://arxiv.org/abs/2304.07687.

Kostyszyn, Kalina (2022). "Paradigmatic distribution of Polish Yers." Presentation for Formal Approaches to Slavic Linguistics. June 24th-26th 2022.

Kostyszyn, Kalina, Yang Liu, Vasudha Varadarajan, Salam Khalifa, and Owen Rambow."A resource for Arabic Broken Plurals." Forthcoming.

Kostyszyn, Kalina and Jeffrey Heinz (2021). "Categorical models of gradient acceptability of word-initial Polish onsets." Proceedings of the 2021 Annual Meeting of Phonology.

Graf, Thomas and **Kalina Kostyszyn** (2021). "Multiple Wh-Movement is not Special: The Subregular Complexity of Persistent Features in Minimalist Grammars," Proceedings of the Society for Computation in Linguistics: Vol. 4 , Article 26.

RESEARCH EXPERIENCE

2019-ongoing SBU, Psychology; Research Assistant
Studying language perception with Arthur Samuel: building and managing online and in-person experiments. Mentoring undergraduates in data collection. Processing data for analysis.

2020 spring SBU, Linguistics; Research Assistant
Researched mathematical syntax with Thomas Graf: studying patterns of persistent features in syntax trees.

2019 summer-2022 SBU, Linguistics; with Jeffrey Heinz, established baseline for neural networks learning subregular languageclassification patterns.

Summers 2017-2018 University of Delaware, Linguistics; Visiting scholar with Irene Vogel
Annotated speech data in Prosodic Typology Lab for cross-linguistic analyses.

TEACHING EXPERIENCE

SBU

Lead Instructor
LIN120 Language and Technology (online - summer, fall 2020)
Teaching Assistant
LIN200: Language in the USA (online - spring 2021/2022)
LIN301: Phonology (fall 2019)
LIN120: Language and Technology (fall 2018/2021, spring 2019)

Microsoft TEALS

Volunteer Teacher (Fall 2021-Spring 2022)
Coordinated with classroom teacher to organize lessons demonstrating basic Python principles for high schoolers.

Summer Youth Camp for Computational Linguistics (SBU)

Primary Instructor (2022)
Organizing materials and schedule for camp.
Instructor (2020-2021, 2023-current)
Created introductory Python modules using linguistic data. Introduced finite-state methods for linguistic purposes. Developed lessons introducing students to neural networks. Supervised student projects.
Developing linguistic textbook with computational frameworks.

BMC

Peer Tutor (Spring 2014-Spring 2017)
Tutored basic data structures in a Java-like environment.
Teaching Assistant (Fall 2014-Fall 2016)
CS110: Introduction to Computer Science

OTHER SKILLS

Proficient with Python, Jupyter Notebooks, Java, and $\LaTeX$
Familiar with C, C++, R
Familiar with Gorilla.sc, Prolific, and Amazon Mechanial Turk for online experiments and surveys
Heritage speaker of Polish

LEADERSHIP

Founder of Stony Brook Linguistics JEDI (Justice, Equity, Diversity, and Inclusion)
Department Student Representative - Fall 2019-Spring 2020
Colloquium Organizer - Spring 2019
Graduate Linguistics Society Treasurer - Fall 2019-2023