UĞURCAN VURGUN

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RESEARCH INTERESTS

Psycholinguistics, Language and Event Cognition; Autism; Biomedical Informatics

EDUCATION

University of Pennsylvania, Philadelphia

2019 - 2024

Ph.D. in Linguistics (Language Processing and Event Cognition)

Department of Linguistics Advisor: Anna Papafragou

Interdisciplinary graduate certificate in Language and Communication Sciences (LCS)

University of Pennsylvania, Philadelphia

2023 - 2025

Master of Science (MS) in Biomedical Informatics

Institute for Biomedical Informatics

Boğaziçi University, Istanbul

2015 - 2019

Master of Arts (MA) in Linguistics

Department of Linguistics

Thesis Title: The Syntax of Focus Particles in Turkish Thesis Supervisors: Mine Nakipoğlu, A. Sumru Özsoy

Koç University, Istanbul

2002 - 2007

Bachelor of Arts (BA) in Business Administration College of Administrative Sciences and Economics

TEACHING EXPERIENCE

University of Pennsylvania College of Liberal and Professional Studies

LING 0001 Introduction to Linguistics

Summer 2023 & Summer 2024

Instructor for the course

The Wharton School

MGMT 8920 Advanced Study Program - Collaborative Innovation Program

Spring 2024

Teaching Assistant for four project teams (MBA/WEMBA students)

Professor: Xu (Henry) Han

MGMT 8920 Advanced Study Program - Collaborative Innovation Program

Fall 2023

Teaching Assistant for four project teams (MBA/WEMBA students)

Professor: Scott Snyder

University of Pennsylvania

LING 0001 Introduction to Linguistics

Fall 2022

Teaching Assistant for two sections

Professor: Mark Liberman

LING 001 Introduction to Linguistics

Fall 2021

Teaching Assistant for two sections

Professor: Gareth Roberts

LING 001 Introduction to Linguistics

Teaching Assistant for two sections

Professor: Martin Salzmann

Boğaziçi University, Istanbul

LING 101 Introduction to Linguistics

Teaching Assistant

Professor: Mine Nakipoğlu

Fall 2018

Spring 2021

PUBLICATIONS

Vurgun, U., Ji, Y., & Papafragou, A. (2024). Aspectual processing shifts visual event apprehension. *Cognitive Science*, 48(6), e13476.

Li, C., Mowery, D. L., Ma, X., Yang, R., **Vurgun, U.**, Hwang, S., Donnelly, H. K., Bandhey, H., Akhtar, Z., Senathirajah, Y., Sadhu, E. M., Getzen, E., Freda, P. J., Long, Q., Becich, M. J. (in review). Realizing the Potential of Social Determinants Data: A Scoping Review of Approaches for Screening, Linkage, Extraction, Analysis, and Interventions. *Journal of Clinical and Translational Science*.

Vurgun, U. (2019). The syntax of focus particles in Turkish. Unpublished master's thesis, Boğaziçi University. Advisors: Dr. H. Mine Nakipoğlu & Dr. A. Sumru Özsoy.

Vurgun, U. (2018). Book review - Contemporary Morphological Theories: A User's Guide. Thomas W. Stewart, 2015. Edinburgh: Edinburgh University Press. 192 pages. ISBN 978-07-486-9268-2. Journal of Linguistic Research, 29(2), 129-137.

CONFERENCE PROCEEDINGS

Vurgun, U., Ji, Y., & Papafragou, A. (2024). Detecting event construal shifts in aspectual coercion. Proceedings from the 46th Annual Meeting of the Cognitive Science Society.

Vurgun, U., Heesu, Y., Landau, B., & Trueswell, J. (2024). Real-time processing of symmetrical predicates: Semantic categorization over time. Proceedings from the 46th Annual Meeting of the Cognitive Science Society.

Vurgun, U., Ji, Y., & Papafragou, A. (2023). Cognitive signatures of aspectual coercion. Proceedings from the 45th Annual Meeting of the Cognitive Science Society.

Vurgun, U., Ji, Y., & Papafragou, A. (2022). Linguistic aspect constrains event apprehension. Proceedings from the 44th Annual Meeting of the Cognitive Science Society.

SELECTED PRESENTATIONS

Vurgun, U., Ji, Y., & Papafragou, A. (2024). Aspectual Coercion: A New Method to Probe Aspectual Commitments. Oral presentation at the Experiments in Linguistic Meaning (ELM) Conference, University of Pennsylvania.

Vurgun, U., Ji, Y., & Papafragou, A. (2024). Aspectual Coercion: A New Method to Probe Aspectual Commitments. Poster presentation at the 37th Annual Conference on Human Sentence Processing, University of Michigan, Ann Arbor.

Vurgun, U., Yun, H., Landau, B., & Trueswell, J. (2024). Symmetrical or not?: A new method to probe real-time semantic categorization. Poster presentation at the 37th Annual Conference on Human Sentence Processing, University of Michigan, Ann Arbor.

Vurgun, U., Cho, S., Fusaroli, R., Ip, M. H. K., Pelella, M. R., Knox, A., et al. (2024). Detecting Autism through Automated Speech Analysis: The Role of Model Complexity and Dataset Balance.

- Poster presentation at the International Society for Autism Research Annual Meeting, Melbourne, Australia.
- Vurgun, U., Cho, S., Fusaroli, R., Ip, M. H. K., Pelella, M. R., Knox, A., Schillinger, S., Hauptmann, A., Covello, M., Madya, M., Lyons, M., Lee, A., Fulop, L., Adeniyi, H., Russell, A., Hicks, G., Anello, O., Walker, K., Fiumara, J., Tunç, B., Sariyanidi, E., Liberman, M., Schultz, R. T., & Parish-Morris, J. (2024). Detecting Autism through Automated Speech Analysis: The Role of Model Complexity and Dataset Balance. Poster presentation at the International Society for Autism Research Annual Meeting, Melbourne, Australia.
- Cho, S., Vurgun, U., Fusaroli, R., Ip, M. H. K., Pelella, M. R., Knox, A., Hauptmann, A., Covello, M., Madya, M., Lyons, M., Lee, A., Fulop, L., Schillinger, S., Russell, A., Hicks, G., Walker, K., Fiumara, J., Chatham, C., Liberman, M., Schultz, R. T., & Parish-Morris, J. (2024). Stable Acoustic Differences between Autistic and Neurotypical Children: A Longitudinal Telephony Study. Oral presentation at the International Society for Autism Research Annual Meeting, Melbourne, Australia.
- Cho, S., **Vurgun, U.**, Fusaroli, R., Ip, M. H. K., Pelella, M. R., Knox, A., Hauptmann, A., Covello, M., Madya, M., Lyons, M., Lee, A., Fulop, L., Russell, A., Hicks, G., Fiumara, J., Pandey, J., Tunç, B., Sariyanidi, E., Liberman, M., Schultz, R. T., & Parish-Morris, J. (2024). Automatically-derived Lexical Features Distinguish Autistic Teens from Neurotypical Peers and Teens with Other Psychiatric Conditions in a Natural Conversation Task. Oral presentation at the International Society for Autism Research Annual Meeting, Melbourne, Australia.
- Ip, Martin H. K., Putnam, O., Cho, S., **Vurgun, U.**, Lyons, M., Knox, A., Hauptmann, A., Covello, M., Madya, M., Adeniyi, H., Hicks, G., Anello, O., Walker, K., Fiumara, J., Cieri, C., Fusaroli, R., Chatham, C., Liberman, M., Schultz, R. T., Parish-Morris, J. (2024). Prosodic similarities and variation in autistic and neurotypical children: A telephone-based study of verbal counting. Oral presentation at the International Society for Autism Research Annual Meeting, Melbourne, Australia.
- Vurgun, U., Cho, S., Fusaroli, R., Ip, M. H. K., Pelella, M. R., Knox, A., Hauptmann, A., Covello, M., Madya, M., Lyons, M., Lee, A., Schillinger, S., Fulop, L., Adeniyi, H., Russell, A., Fiumara, J., Hicks, G., Anello, O., Walker, K., Tunç, B., Sariyanidi, E., Liberman, M., Schultz, R. T., & Parish-Morris, J. (2024). Automatic classification of autism using automatic speech recognition and large language models (LLMs). Poster presentation at Meeting on Language and Autism, Durham, NC.
- Cho, S., **Vurgun**, U., Fusaroli, R., Ip, M. H. K., Pelella, M.R., Knox, A., Hauptmann, A., Covello, M., Madya, M., Lyons, M., Lee, A., Schillinger, S., Fulop, L., Russell, A., Hicks, G., Fiumara, J., Pandey, J., Tunç, B., Sariyanidi, V., Liberman, M., Schultz, R. T., & Parish-Morris, J. (2024). Autistic teens' word choice differs from neurotypical peers and teens with attention-deficit/hyperactivity disorder (ADHD) in a natural conversation task. Poster presentation at Meeting on Language and Autism, Durham, NC.
- Ip, M. H. K., Putnam, O. C., Cho, S., **Vurgun, U.**, Lyons, M., Knox, A., Hauptmann, A., Covello, M., Fulop, L., Russell, A., Walker, K., Miller, J., Fiumara, J., Fusaroli, R., Chatham, C., Cieri, C., Lee, A., Liberman, M., Schultz, R. T., & Parish-Morris, J. (2024). Does speech prosody differ in a socially unengaging task? Preliminary findings from autistic and non-autistic children's verbal counting. Poster presentation at Meeting on Language in Autism, Durham, NC.
- Vurgun, U., Ji, Y., & Papafragou, A. (2023). Aspectual processing and event perception. Poster presentation at the 36th Annual Conference on Human Sentence Processing, University of Pittsburgh.
- **Vurgun, U.**, Ji, Y., & Papafragou, A. (2023). Aspectual framing of events shifts online event apprehension. Poster presentation at at the 98th Annual Meeting of the Linguistic Society of America, Denver, CO.
- **Vurgun**, U., Ji, Y., & Papafragou, A. (2022). Lexical aspect maps onto event apprehension. Oral presentation at the 2nd Experiments in Linguistic Meaning Conference, University of Pennsylvania.

Vurgun, U. (2020). Both locative alternation variants in Turkish are change-of-state predicates with ResultPs. Oral presentation at the 4th Conference of Central Asian Language and Linguistics, Indiana University.

Vurgun, U. (2019). A lexical-typological approach explaining the limited existence of locative alternation in Turkish. Poster presentation at the 4th Workshop on Turkic and Languages in Contact with Turkic (Tu+4), NYU.

GRANTS, FELLOWSHIPS, AND AWARDS

Benjamin Franklin Fellowship, University of Pennsylvania

2019 - 2024

University of Pennsylvania, Language and Communication Sciences Research Fund 2021, 2022, 2023, 2024

University of Pennsylvania, Integrated Language Sciences and Technology Research Fund 2022, 2023, 2024

Simons Foundation Autism Research Initiative (SFARI) Travel Award

2024

The 48th Annual Boston University Conference On Language Development, Diversity Travel Award 2023

University of Pennsylvania, GAPSA Research Travel Grant

2022

University of Pennsylvania, SAS Dean's Travel Subvention

2022

Boğaziçi University, Research Travel Grant

2019

Vehbi Koç Fellowship, Koç University

2002 - 2007

TECHNICAL SKILLS

| Programming & Analysis |
|------------------------|
| Machine Learning |

Large Language Models

R, Python, PyTorch, TensorFlow, SQL

Scikit-learn, Keras, XGBoost HuggingFace Transformers

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- Fine-tuning: Transfer learning, Few-shot learning

- Advanced techniques: Prompt engineering, PEFT, LoRA

- Deployment: Model compression, Quantization

Software & Tools
Statistical Analysis
Linguistic Tools
Version Control

Data Visualization

Cloud Platforms

Eye Tracking (Tobii), PCIbex, PsychoPy Mixed-effects modeling, Time series analysis

TalkBank, NLTK, spaCy

Git, GitHub

ggplot2, matplotlib

Microsoft Azure, Databricks

EMPLOYMENT

Unilever, Turkey

January 2008 - April 2018

Latest position: Customer and Channel Development Manager

PROFESSIONAL MEMBERSHIPS AND ACTIVITIES

Family Resource Center, University of Pennsylvania

Sep 2019 - Jun 2020

Wharton Founders' Club

Member

Oct 2023 - Present

May 2024 - Present

American Psychological Association

Member

- · Division 7: Developmental Psychology
- · Division 33: Intellectual and Developmental Disabilities/Autism Spectrum Disorder

REVIEWING

Folia Linguistica

CogSci (The Annual Conference of Cognitive Science Society)

Journal of Clinical and Translational Science