# UĞURCAN VURGUN

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#### RESEARCH INTERESTS

language and event cognition; language processing, biomedical informatics; autism interventions

## **EDUCATION**

## University of Pennsylvania, Philadelphia

2019 - 2024

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

Department of Linguistics

Thesis Title: From Words to Worlds: Telicity and the Malleability of Event Representations

Thesis Supervisor: 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 Ozsov

#### 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

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

Spring 2021

Professor: Martin Salzmann

## 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

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

Professor: Scott Snyder

Boğaziçi University, Istanbul

LING 101 Introduction to Linguistics

Teaching Assistant

Professor: Mine Nakipoğlu

Fall 2018

Fall 2023

## **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. (2024). 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). Detecting event construal shifts in aspectual coercion. Oral presentation at the 46th Annual Meeting of the Cognitive Science Society, Rotterdam, Netherlands.

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

**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.**, Ji, Y., & Papafragou, A. (2024). Cognitive signatures of aspectual coercion. Poster presentation at the 10th Mid-Atlantic Colloquium of Studies in Meaning (MACSIM), University of Maryland, College Park.
- 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.
- Kaviyarasu, A., **Vurgun, U.**, Hwang, S., Acevedo, A., Mowery, D. L., Abella, B. S., & Mitchell, O. J. L. (2024). Leveraging large language models to optimize clinical text analysis for in-hospital cardiac arrest identification. Poster presentation at the Department of Medicine Research Day, University of Pennsylvania.
- 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). Lexical aspect maps onto event apprehension. Poster presentation at the 9th Mid-Atlantic Colloquium of Studies in Meaning (MACSIM), University of Pennsylvania, Philadelphia.

**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.

#### REVIEWING

Folia Linguistica

CogSci (The Annual Conference of Cognitive Science Society)

Journal of Clinical and Translational Science

# GRANTS, FELLOWSHIPS, AND AWARDS

Benjamin Franklin Fellowship, University of Pennsylvania	2019 - 2024
University of Pennsylvania, Language and Communication Sciences Research 2022, 2023, 2024	<b>Fund</b> 2021,
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 Developmer Travel Award	nt, Diversity 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 R, Python, PyTorch, TensorFlow, SQL, JavaScript

Machine Learning Scikit-learn, Keras, XGBoost Large Language Models HuggingFace Transformers

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

- Advanced techniques: Prompt engineering, PEFT, LoRA

- Deployment: Model compression, Quantization

Software & Tools Eye Tracking (Tobii), PCIbex, PsychoPy Statistical Analysis Mixed-effects modeling, Time series analysis

Linguistic Tools TalkBank, NLTK, spaCy

Version Control Git, GitHub

Data Visualization ggplot2, matplotlib

Database Management SQL, MySQL, Database Design

Web Development JavaScript, HTML, CSS
Cloud Platforms Microsoft Azure, Databricks

## **EMPLOYMENT**

Unilever Turkey

Various Roles, Including Channel and Category Development Manager

2008 - 2018

- Progressed through multiple roles over a 10-year tenure, demonstrating consistent growth and adaptability in sales, marketing, and management positions.
- Developed and executed strategic promotional plans, resulting in increased sales, improved category penetration, and optimized promotional spending across multiple product lines.
- Led large cross-functional teams (200+ employees) across multiple regions, fostering a performancedriven culture and achieving significant improvements in turnover, market share, and profitability.
- Implemented data-driven strategies for product placement, pricing, and distribution, enhancing brand visibility and market presence.
- Collaborated with key stakeholders to create and execute joint business plans, aligning company objectives with customer and distributor goals.
- Demonstrated expertise in market research, business insights, and statistical modeling to inform strategic decision-making and drive business growth.

Key Skills: Strategic Planning, Team Leadership, Sales & Marketing Strategy, Market Analysis, Performance Optimization, Stakeholder Management, Trade Marketing, Supply Chain Management

## PROFESSIONAL MEMBERSHIPS AND ACTIVITIES

# American Psychological Association

May 2024 - Present

Member

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

## Wharton Founders' Club

Oct 2023 - Present

Member

#### Family Resource Center, University of Pennsylvania

Sep 2019 - Jun 2020

Student Parent Advisory Board Member