

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

Spring 2021

Boğaziçi University, Istanbul
LING 101 Introduction to Linguistics
Teaching Assistant
Professor: Mine Nakipoğlu

Fall 2018

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.

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). Aspectual framing of events shifts online event apprehension. Poster presentation 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	R, Python, PyTorch, TensorFlow, SQL
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), PCLibex, PsychoPy
Statistical Analysis	Mixed-effects modeling, Time series analysis
Linguistic Tools	TalkBank, NLTK, spaCy
Version Control	Git, GitHub
Data Visualization	ggplot2, matplotlib
Cloud Platforms	Microsoft Azure, Databricks

EMPLOYMENT

Unilever, Turkey	January 2008 - April 2018
<i>Latest position: Customer and Channel Development Manager</i>	

CERTIFICATIONS

CITI (Collaborative Institutional Training Initiative) Program

Biomedical Responsible Conduct of Research

Issued Sep 2023

Credential ID: 58359289

Data or Specimens Only Research

Issued Sep 2023

Credential ID: 58359288

Biomedical Research

Issued Jun 2023

Credential ID: 52185873

Biomedical Responsible Conduct of Research Course 2 (3rd Year Graduate Students)

Issued Jun 2023

Credential ID: 56572579

Refresher 101

Issued Jun 2023

Credential ID: 52185874

GCP Social and Behavioral Research Best Practices for Clinical Research

Issued Jun 2022

Credential ID: 49260570

Humanitarian Use Devices (HUDs)

Issued Jun 2022

Credential ID: 49260571

Clinical Trial Billing Compliance (CTBC)

Issued May 2022

Credential ID: 33833621

Social/Behavioral Research Course

Issued May 2022

Credential ID: 33833618

CITI Good Clinical Practice Course

Issued Aug 2021

Credential ID: 33833619

Refresher 101 - Social and Behavioral

Issued Mar 2020

Credential ID: 35960454

Social and Behavioral Responsible Conduct of Research

Issued Mar 2020

Credential ID: 33833620

University of Pennsylvania Perelman School of Medicine
Penn Clinical Research (CR): Onboarding Program
Issued Jun 2022

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

REVIEWING

Folia Linguistica

CogSci (The Annual Conference of Cognitive Science Society)

Journal of Clinical and Translational Science