# Huteng Dai

Rutgers University Email: huteng.dai@rutgers.edu
18 Seminary Place Personal website: hutengdai.com
New Brunswick, NJ 08901-1184 USA

#### Research Interests

Computational linguistics, Phonology, Phonetics, Experimental linguistics, Harmony system, Tone, Turkic, Mandarin

#### Education

2018-present PhD student, Department of Linguistics, Rutgers University, New Brunswick 2018-2022 Certificate in Cognitive Science, Center for Cognitive Science (RuCCS), Rutgers University, New Brunswick

2014-2018 BA, Capital Normal University [首都师范大学], Beijing

Thesis: A Constraint-Based Analysis of Disyllabic Tone Sandhi in Linchuan.

Advisor: Zihe Li (now Peking University)

Non-degree

2019 LSA Linguistics Institute, University of California, Davis

2018 Linguistics Institute of China, Capital Normal University, Beijing

2017 LSA Linguistics Institute, University of Kentucky

2017 Exchange student, Department of Linguistics, University of California, Santa Barbara

#### Grant/Fellowships/Awards

University Graduate Excellence Fellowship. Fall 2022. Rutgers University; Cognitive Science Center Travel Grant. Fall 2019, Rutgers University; University Graduate Excellence Fellowship. Fall 2018-Spring 2020. Rutgers University.

#### **Publications**

Paper-reviewed conference proceedings

Huteng Dai and Richard Futrell. Simple induction of (deterministic) probabilistic finite-state automata for phonotactics by stochastic gradient descent. In *Proceedings of the 18th SIGMORPHON Workshop on Computational Research in Phonetics*, *Phonology, and Morphology*, 2021

#### Abstract-reviewed conference proceedings

- Huteng Dai and Richard Futrell. Learning phonotactics in a differentiable framework of subregular languages. In *Proceedings of the Annual Meetings on Phonology*, volume 9, 2022
- Huteng Dai. Learning Nonlocal Phonotactics in a Strictly Piecewise Probabilistic Phonotactic Model. In *Proceedings of the Annual Meetings on Phonology*, volume 8, 2021
- Huteng Dai. Gradient similarity in Lezgian laryngeal harmony: representation and computation. In *Proceedings of the 38th West Coast Conference on Formal Linguistics*. Cascadilla Press, 2021
- Wenyue Hua, Adam Jardine, and **Huteng Dai**. Learning Underlying Representations and Input-Strictly-Local Functions. In *Proceedings of the 37th West Coast Conference on Formal Linguistics*. Cascadilla Press, 2021
- 2020 **Huteng Dai** & Richard Futrell. Information-theoretic characterization of the subregular hierarchy. In *Proceedings of the Society for Computation in Linguistics*, volume 3, 2020

#### Selected presentations

- Upcoming **Huteng Dai**. TBA. Invited Talk at City University of New York Graduate Center, New York City, NY.
- Upcoming **Huteng Dai**. Learning phonotactics in the presence of exceptions with a categorical approach. Invited Talk at Department of Language Science University of California, Irvine, Irvine, CA.
- Upcoming **Huteng Dai**. Phonotactic learning in the presence of exceptions with a categorical approach. Talk presented at Annual Meeting on Phonology (AMP), Los Angeles, CA.
  - Huteng Dai and Richard Futrell. Learning Phonotactics in a Differentiable Framework of Subregular Languages. Talk presented at Annual Meeting on Phonology (AMP), online.
  - Huteng Dai and Richard Futrell. Simple induction of (deterministic) probabilistic finite-state automata for phonotactics by stochastic gradient descent. Talk presented at ACL Workshop on Computational Research in Phonetics, Phonology, and Morphology (SIGMORPHON), online.
  - Tajudeen Mamadou Y, **Huteng Dai**, Yair Haendler and Mariapaola D'Imperio. The Role of Global and Local Pitch Levels in the Perception of Questions in Ede Chaabe. Poster presented at Phonetics and Phonology in Europe (PaPE), online.
  - Huteng Dai. Learning nonlocal phonotactics in Strictly Piecewise phonotactic model: recent progress. Talk presented at Society for Computation in Linguistics (SCiL), online.
  - 2020 **Huteng Dai**. Structure matters: Learning nonlocal phonotactics in Strictly Piecewise phonotactic model. Talk presented at Annual Meeting on Phonology (AMP), online.

- 2020 Huteng Dai. Gradient similarity in Lezgian laryngeal harmony: representation and computation. Talk presented at West Coast Conference in Formal Linguistics (WCCFL), Vancouver, BC Canada.
- 2020 Wenyue Hua, Adam Jardine, and **Huteng Dai**. A subregular approach to the problem of learning underlying representations. Poster presented at West Coast Conference in Formal Linguistics (WCCFL), Vancouver, BC Canada.
- 2020 Huteng Dai. Gradient similarity in Lezgian laryngeal harmony: representation and computation. Talk presented at Berkeley Linguistics Society (BLS) Workshop "Phonological Representations: at the crossroad between gradience and categoricity", Berkeley, CA.
- 2020 **Huteng Dai** & Richard Futrell. Information-theoretic Characterization of the Subregular Hierarchy. Talk + Poster presented at Society for Computation in Linguistics "Workshop on Formal Language Theory in Linguistics", New Orleans, LA.
- 2020 Huteng Dai. Scalar similarity and gradient featural representation in Lezgian laryngeal harmony. Poster presented at the 94th Annual Meeting of the Linguistic Society of America, New Orleans, LA.

## **Teaching Experience**

2023 Spring Instructor (as scheduled), RUTGERS UNIVERSITY

Introduction to Linguistic Theory (Honor College);

2022 Spring Instructor, RUTGERS UNIVERSITY

Linguistic Perspectives on Language: Invented Languages;

2021 Fall Instructor, RUTGERS UNIVERSITY

Linguistic Perspectives on Language: Invented Languages;

2021 Spring Instructor, RUTGERS UNIVERSITY

Introduction to Linguistic Theory;

2020 Fall Teaching Assistant, RUTGERS UNIVERSITY

2018.3-2018.6 Introduction to Linguistic Theory. Teaching Assistant, Capital Normal Univer-

The Phonetics and Phonology of Chinese;

2018.7-2018.8 Teaching Assistant, LINGUISTICS INSTITUTE OF CHINA

Phonology II; Instructor: Lian-Hee Wee Syntax II; Instructor: Wei-Tien Dylan Tsai Semantics II; Instructor: Haihua Pan

## Fieldwork Experience

2017.1 Fieldwork in Jiangxi Linchuan, Linchuan dialect

2016.7 Fieldwork in Yunnan Lijiang, Naish language

## Reviewing

Society for Computation in Linguistics (2021)

#### Services

Volunteer and Session Chair, The 53rd Annual Meeting of the North East Linguistic Society at Rutgers

2019-present Organizer, Rutgers Phonology and Phonetics Research Group (РнохХ)

2019-2020 Organizer, Rutgers Mathematical and Computational Linguistics Group

2020.1-2020.7 Tenure-track job search committee (Phonology)

2018-2020 Editor, Facebook Page, Department of Linguistics, Rutgers University

2018 Founder & Organizer, Bejing P-side Reading Group

## **Technical Proficiency**

PROGRAMMING LANGUAGES: Python, R, LTEX
TOOLS: Git, Ibex Farm, Praat, ELAN, EyeLink, FSL (Neuroimage analysis)

#### Natural Languages

Mandarin Chinese (Native), English (Fluent), Gan Chinese (Native), Naish (FIELD-WORK)

## Memberships

Rutgers Computational Linguistics Lab Rutgers Phonology and Phonetics Research Group (PhonX) Rutgers Prosody Group LINGUISTIC SOCIETY OF AMERICA (LSA)