

Rutgers Department of Linguistics
18 Seminary Place
New Brunswick, New Jersey 08901-1184

<https://pterosdiacos.github.io/>
yc825@linguistics.rutgers.edu

PROFESSIONAL PROFILE

- Linguistics** Ph.D. student in linguistics specialized in computational linguistics, semantics, syntax-semantics interface, and discourse analysis. Strong critical-thinking and problem-solving skills.
- Computation** 10+ years of experiences in algorithms and data structure. The First Prize in National Olympiad in Informatics in Provinces 2007, China.
- NLP/NLU** Research focusing on how machine learning models and formal theories inform each other. Relevant coursework: [NLU and Computational Semantics](#), [Project Seminar: Linguistic Knowledge in Reusable Sentence Encoders](#) at NYU. [Graph formalisms for meaning representations](#) at NASSLLI 2018, CMU. Statistical NLP ([Coursera](#)), Machine Learning ([Coursera](#)), Introduction to Deep Learning ([Coursera](#)), Bayesian Methods for Machine Learning ([Coursera](#)).

EXPERIENCE

- **Ontology Linguist** 08/2019–10/2019
Assistant XFN Group, Facebook (via PRO Unlimited)
Prototyped machine learning models for cross-domain semantic parsing. Automated inferences in OWL 2 web ontology and sub-ontology extraction.
- **Teaching Assistant/Course Instructor** 09/2018–present
Linguistics Department, Rutgers University
Course taught: *Introduction to Linguistic Theory, Invented Languages*.
- **Graduate Fellow** 09/2016–09/2018
Linguistics Department, Rutgers University
- **Research Assistant** 12/2014–07/2015
Center for Sign Linguistics and Deaf Studies, CUHK
Provided linguistic expertise and assisted in developing a Chinese grammatical knowledge assessment software for deaf/hard of hearing children.

EDUCATION

- **Ph.D. in Linguistics** 2016–present
Rutgers University–New Brunswick.
- **M.A. in Chinese Linguistics and Language Acquisition** 2013–2014
The Chinese University of Hong Kong.
Dean's List. Best M.A. Thesis Award.
- **B.A. in Teaching Chinese as a Foreign Language** 2009–2013
Sichuan Normal University, China.
Distinguished Thesis Award.

PROJECTS

- [Graph Representation of Meaning](#) ongoing
Revised Abstract Meaning Representation to model plurality and quantification in natural language semantics. Developed a semantic parser based on CCG and hyperedge replacement algebra.
- [Investigating BERT's Knowledge of Language: Five Analysis Methods with NPIs.](#) 2019
Proceedings of EMNLP 2019.
Team project role: constructed and conducted transfer learning experiments.
- [Automated Fact-Value Distinction in Court Opinions](#) 2018
European Journal of Law and Economics. With Daniel Chen and Elliot Ash.
Showed in application that the value segments of opinions are more informative of the ideological direction of U.S. circuit court opinions.
- [Incremental topological sorting](#) 2017
Designed algorithms for topological sorting with disjunctive precedence conditions. Experimented with different dynamic updating strategies.

SKILLS

Machine learning modeling in NLP	Linguistic data analysis
Python, C, Matlab, PyTorch, Tensorflow, Scikit-learn	Statistics

LANGUAGES

Mandarin (native), English (fluent), Japanese (working fluency; certified JLPT Level N1), Cantonese (limited fluency), French (beginner), Hong Kong Sign Language (beginner).