

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

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

PROFESSIONAL SUMMARY

- Linguistics PhD student in linguistics specialized in computational semantics, syntax-semantics interface, and discourse analysis. Strong critical-thinking and problem-solving skills.
- Computation Experiences in algorithm and data structure from engaging in Olympiad in Informatics since high school. The First Prize in the 13th National Olympiad in Informatics in Provinces, China.
- NLP/NLU Enthusiastic about how machine learning models and formal theories inform each other. Relevant coursework: [Natural Language Understanding and Computational Semantics \(LING-GA 1012\)](#), [Team Project Seminar: Linguistic Knowledge in Reusable Sentence Encoders \(LING-GA 3340\)](#) at New York University. [Graph formalisms for meaning representations](#) at NASSLLI 2018, Carnegie Mellon University. Statistical Natural Language Processing at [Coursera](#).

SKILLS

Statistical and neural modeling in NLP Linguistic Analysis
Programming in Python, C, Pascal

LANGUAGES

- Fluent Mandarin (native), English (fluent), Japanese (working fluency; certified Level N1, Japanese Language Proficiency Test 2013), Cantonese (limited fluency).
- Basic French (beginner), Hong Kong Sign Language (beginner).

PROJECTS

- Ongoing Graph Representation of Meaning. Revised Abstract Meaning Representation to model scope and quantification in natural semantics. Developed a model-theoretical interpreter for graphs and a construction mechanism based on CCG and hyperedge replacement algebra.
- 05/2019 [Investigating BERT's Knowledge of Language: Five Analysis Methods with NPIs \(accepted to EMNLP 2019\)](#). Team project supervised by Sam Bowman at NYU.
- 06/2018 Automated Fact-Value Distinction in Court Opinions. Open access at [SSRN](#). In collaboration with Daniel L. Chen at the [New York University Center for Data Science and Data Science Justice Collaboratory](#).
 - Shown in application that value segments of court opinions are more informative than fact segments of the ideological direction of the U.S. Circuit Court.
- 12/2017 Incremental topological sorting (<https://github.com/PterosDiacos/Incremental-Topo-Sort>).
 - Modified Kahn's algorithm to handle topological sorting with disjunctive precedence conditions. Experimented with different incremental updating strategies.

WORK

- 08/2019–10/2019 Ontology Linguist on Assistant XFN Group, Facebook (via PRO Unlimited).
Model prototyping in semantic parsing and ontology reasoning.
- 09/2018–present Teaching Assistant/Course Instructor at Rutgers University. Course taught: Introduction to Linguistic Theory (LING 201).
- 12/2014–07/2015 Research Assistant at the Center for Sign Linguistics and Deaf Studies, The Chinese University of Hong Kong.
Provided linguistic expertise and assisted in developing a tablet-based [Chinese grammatical knowledge assessment tool](#) for deaf/hard of hearing children.

EDUCATION

- 2016–present Rutgers, The State University of New Jersey,
Doctor of Philosophy in Linguistics.
- 2013–2014 The Chinese University of Hong Kong,
Master of Arts in Chinese Linguistics and Language Acquisition,
On Dean's List 2013–2014,
Won the Best M.A. Thesis Award 2014 with *The syntax and semantics of gapping-like ellipsis in Chinese*.
- 2009–2013 Sichuan Normal University, China,
Bachelor of Arts in Teaching Chinese as a Foreign Language,
Won the Distinguished Thesis Award 2013 with *The semantics of the mix-object construction*.

OTHER ACADEMIC EXPERIENCE

- 06/2018 North American Summer School on Logic, Language, and Information.
- 07/2015 LSA Linguistic Summer Institute, University of Chicago.