Yuchen Li

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EDUCATION

Carnegie Mellon University   August 2020 - May 2025 (expected)
- Ph.D. student in Machine Learning, advised by Prof. Andrej Risteski   Pittsburgh, PA
- Research interests: theory of deep learning and its intersection with natural language processing   GPA: 4.25/4.33

University of Illinois at Urbana-Champaign   August 2015 - May 2019
- B.S. Statistics and Computer Science; second major in Mathematics; minor in Electrical Engineering   Urbana-Champaign, IL
- Research mentors: Prof. Jiawei Han, Prof. AJ Hildebrand, Prof. Pramod Viswanath   GPA: 4.0/4.0
- Summa Cum Laude; Highest Distinction in both majors
- Bronze Tablet Scholar: top 3% in the graduating class
- John R. Pasta Outstanding Undergraduate Award 2018: 1/200 Computer Science Juniors in the College of Liberal Arts and Sciences
- Dean's List; James Scholar Honors Program

WORK

Machine Learning Engineer, **Quora, Inc.**   August 2019 - August 2020
- Improved machine learning algorithms in production to increase the prediction quality and decrease latency   Mountain View, CA
- Launched online A/B testing to compare different model variants based on a set of key business metrics
- Directly responsible individual (DRI) in charge of controlling the on-call workload in the Ads Ranking team

Software Engineer Intern, **Facebook, Inc.**   May 2018 - August 2018
- Designed and implemented a platform for investigating machine learning feature importance   Menlo Park, CA
- Proposed and developed feature perturbation and statistical analysis methods

PUBLICATIONS

1. **Yuchen Li *,** Andrej Risteski *. *The Limitations of Limited Context for Constituency Parsing*. Association for Computational Linguistics (ACL) 2021.
2. Xinwei He *, A.J. Hildebrand *, **Yuchen Li ***, Yunyi Zhang *. *Complexity of Leading Digit Sequences*. Journal of Discrete Mathematics & Theoretical Computer Science, vol. 22 no. 1, Automata, Logic and Semantics 2020.
3. Yu Shi *, Jiaming Shen *, **Yuchen Li**, Naijing Zhang, Xinwei He, Zhengzhi Lou, Qi Zhu, Matthew Walker, Myunghwan Kim and Jiawei Han. *Discovering Hypernymy in Text-Rich Heterogeneous Information Network by Exploiting Context Granularity*. Conference on Information and Knowledge Management (CIKM) 2019.
4. Hongyu Gong, **Yuchen Li**, Suma Bhat and Pramod Viswanath. *Context-Sensitive Malicious Spelling Error Correction*. The Web Conference (WWW) 2019.
5. **Yuchen Li ***, Zhengzhi Lou *, Yu Shi, and Jiawei Han. *Temporal Motifs in Heterogeneous Information Networks*. In Proceedings of the 14th International Workshop on Mining and Learning with Graphs (MLG) 2018.

* indicates equal contribution or alphabetical order

TALKS

The Limitations of Limited Context for Constituency Parsing
- Association for Computational Linguistics (ACL) Conference   Virtual, August 2021
- NEC Laboratories Europe   Virtual, July 2021
- Approximately Correct Machine Intelligence (ACMI) Lab, CMU   Virtual, June 2021

TEACHING

Volunteer Teaching Assistant, Data Science Bootcamp   May 2019
- Contributed to creating a Python tutorial focusing on NumPy and Matplotlib libraries   Urbana, IL
- Helped in the class section for about 20 math graduate students and answered their programming questions

Member, Eta Kappa Nu (HKN) Honors Society Alpha Chapter at UIUC   August 2016 - May 2019
- Contributed to its educational website Weber's Wiki   Urbana, IL
- Developed and taught two Analog Signal Processing midterm review sessions, each with about 40 students attending

Grader, Introduction to Computing   January 2016 - May 2016
- Graded homework for around 35 students per week   Urbana, IL
- Proctored the final exam for around 150 students in a lecture hall, collaborating with five other course staffs

SERVICE

Reviewer, Research Conferences
- Neural Information Processing Systems (NeurIPS)   2021

Mentor, CMU Computer Science Graduate Application Support Program   November 2020
- Connected with potential applicants, particularly those from underrepresented groups   Pittsburgh, PA
- Offered feedbacks on their application materials and answered their questions related to graduate school application

HONORS

- Conference Travel Grant: for top undergraduate students presenting their research projects   College level, 2018
- University of Illinois Undergraduate Math Contest: 4th place   College level, 2016
- Virginia Tech Regional Math Contest: ranked 17 out of 701 participants all over the USA   National level, 2015
- American Invitational Mathematics Examination II (AIME II): 11th Grade 97.59% worldwide   International level, 2014
- American Mathematics Competitions 10B (AMC 10B): the 11th place out of 37394 participants globally   International level, 2013

SKILLS

- Proficient in *Python, PyTorch, TensorFlow, C, SQL, MATLAB, PHP*;   intermediate in *C++, R, Haskell*;   basic in *Java, JavaScript*