# Belinda Z. Li

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## Education

#### Massachusetts Institute of Technology

2020 -

PhD student, Electrical Engineering and Computer Science

- GPA: 5.0/5.0
- Advisor: Jacob Andreas

#### University of Washington

2015 - 2019

Bachelors of Science, Computer Science, Magna Cum Laude

- Cumulative GPA: 3.95 / 4.0, Major GPA: 3.96 / 4.0
- Advisor: Luke Zettlemoyer

#### **Publications**

## Peer-Reviewed Publications

- [1] **Belinda Z. Li**, Sewon Min, Srinivasan Iyer, Yashar Mehdad, and Wen-tau Yih. "Efficient One-Pass End-to-End Entity Linking for Questions". In: *Proceedings of the 2020 Conference on Empirical Methods in Natural Language Processing (EMNLP)*. Online: Association for Computational Linguistics, Nov. 2020, pp. 6433–6441.
- [2] Nayeon Lee, **Belinda Z. Li**, Sinong Wang, Wen-tau Yih, Hao Ma, and Madian Khabsa. "Language Models as Fact Checkers?" In: *Proceedings of the Third Workshop on Fact Extraction and VERification (FEVER)*. Association for Computational Linguistics, July 2020, pp. 36–41.
- [3] **Belinda Z. Li**, Gabriel Stanovsky, and Luke Zettlemoyer. "Active Learning for Coreference Resolution using Discrete Annotation". In: *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics*. Association for Computational Linguistics, July 2020, pp. 8320–8331.

## **Preprints**

- [4] Sinong Wang, **Belinda Z. Li**, Madian Khabsa, Han Fang, and Hao Ma. *Linformer: Self-Attention with Linear Complexity*. 2020. arXiv: 2006.04768 [cs.LG].
- [5] Nayeon Lee, **Belinda Z. Li**, Sinong Wang, Pascale Fung, Wen-tau Yih, Hao Ma, and Madian Khabsa. If You Can't Detect Them, Join Them: Multitask Learning For Misinformation Detection. 2020.
- [6] Qinyuan Ye, **Belinda Z. Li**, Sinong Wang, Benjamin Bolte, Hao Ma, Xiang Ren, Wen-tau Yih, and Madian Khabsa. *Studying Strategically: Learning to Mask for Closed-book QA*. 2020. arXiv: 2012.15856 [cs.CL].

## Experience

# Research Experience

# Massachusetts Institute of Technology

Sep. 2020 -

Research Assistant, with Jacob Andreas

# University of Washington

Jan. 2018 – June 2019

Undergraduate Research Assistant, with Luke Zettlemoyer

#### University of Washington

June 2016 – Aug. 2016

Undergraduate Research Assistant, UW Biological Structures

# **Industry Experience**

Facebook AI Aug. 2019 – Sep. 2020

Software Engineer, AI Integrity Team (Facebook AI Applied Research)

- Built multi-lingual, multi-modal (image + text) representations for Facebook posts. Shipped to hate speech domain,

improving offline hate speech prevalence metrics by 25% (3rd most important model in hate-speech production meta-classifier): https://ai.facebook.com/blog/ai-advances-to-better-detect-hate-speech/

- Worked on entity linking for questions [1], fake news detection [2, 5], model (Transformer) efficiency [4], and strategic pre-training for QA [6].

**Facebook** June 2018 – Aug. 2018

Software Engineer Intern, Bot Detection/Traffic Quality Team

- Worked on automated bot detection using mouse movements.

# Teaching & Research Mentorship

# Massachusetts Institute of Technology

Undergraduate Research (UROP) Mentor

- Managing the project and leading the undergraduate research experience.

1. Mentee: Nitya Parthasarathy

Sep. 2020 -

Project: identifying and mitigating toxicity in language model outputs.

#### University of Washington

March 2019 - June 2019

Teaching Assistant, CSE 311: Foundations of Computing I (Discrete Math), with Kevin Zatloukal

- Leading weekly section, designing course section material, hosting office hours and review sessions.

# University of Washington

Jan. 2019 - March 2019

Teaching Assistant, CSE 312: Foundations of Computing II (Probability/Statistics), with Martin Tompa

#### University of Washington

Jan. 2018 – March 2018

Teaching Assistant, CSE 312: Foundations of Computing II (Probability/Statistics), with Martin Tompa

#### University of Washington

Sep. 2017 – Dec. 2017

Teaching Assistant, CSE 331: Software Design and Implementation, with Kevin Zatloukal

#### Talks

#### Efficient One-Pass End-to-End Entity Linking for Questions

Aug. 2020

IE Workshop @ Facebook AI's 2020 NLP Summit

## Awards

#### Academic

Ida M. Green Memorial Fellowship

2020 - 2021

ACL Student Scholarship

2020 2018 - 2019

Denice Dee Denton Scholars Endowment

2016 - 2019

Define Dee Defiton Scholars Endow

2015 – 2017 (annual), SP18/F18/SP19 (quarterly)

Dean's List

(every eligible quarter)

National Merit Scholar

2016

#### Miscellany

Dance: Overseas Taoli Cup Dance Competition Gold Medal (2016); C Dream Performing Arts Scholarship (2016)

Piano: ABRSM Grade 8 Piano Pass with Distinction (2016, highest score category in highest pre-collegiate level); Eastside Music Teachers' Association Scholarship Competition, 1st place (2014/2015/2016, 3-time champion)

## Service

#### Program Committee

- Reviewer: ACL 2021, NAACL 2021, COLING 2020, EMNLP 2020

#### Student Volunteer/Scholarship

- ACL 2020

## MIT GAAP Mentor 2020

- Mentoring individuals from underrepresented groups through the graduate application process.