

## EDUCATION

---

<b>Princeton University</b> Ph.D. in Computer Science, Advisor: Danqi Chen	Princeton, NJ 2024–Current
<b>Princeton University</b> M.S.E. in Computer Science, GPA: 4.00/4.00 Thesis: “Long-Context Language Modeling with Parallel Context Encoding”, Advised by Danqi Chen.	Princeton, NJ 2023–2024
<b>Princeton University</b> B.S.E. in Computer Science, Highest Honors ( <i>summa cum laude</i> ), GPA: 3.99/4.00 Thesis: “How to Answer a Question? Rethinking Open-Domain Question Answering with Multi-Type Questions”, Advised by Danqi Chen.	Princeton, NJ 2019–2023

## PUBLICATIONS

---

1. **Howard Yen**, Tianyu Gao, Minmin Hou, Ke Ding, Daniel Fleischer, Peter Izsak, Moshe Wasserblat, and Danqi Chen. “HELMET: How to Evaluate Long-Context Language Models Effectively and Thoroughly”. *To appear in Proceedings of The International Conference on Learning Representations (ICLR), 2025*. [Paper] [Code] [Site]
2. Hongjin Su\*, **Howard Yen**\*, Mengzhou Xia\*, Weijia Shi, Niklas Muennighoff, Han-yu Wang, Haisu Liu, Quan Shi, Zachary S. Siegel, Michael Tang, Ruoxi Sun, Jinsung Yoon, Sercan O. Arik, Danqi Chen, Tao Yu. “BRIGHT: A Realistic and Challenging Benchmark for Reasoning-Intensive Retrieval”. *To appear in Proceedings of The International Conference on Learning Representations (ICLR), 2025*. [Paper] [Code] [Site]
3. Xi Ye, Fangcong Yin, Yinghui He, Joie Zhang, **Howard Yen**, Tianyu Gao, Greg Durrett, and Danqi Chen. “LongProc: Benchmarking Long-Context Language Models on Long Procedural Generation”. *Preprint, 2025*. [Paper] [Code] [Site]
4. Tianyu Gao\*, Alexander Wettig\*, **Howard Yen**, and Danqi Chen. “How to Train Long-Context Language Models (Effectively)”. *Preprint, 2024*. [Paper] [Code]
5. **Howard Yen**, Tianyu Gao, and Danqi Chen. “Long-Context Language Modeling with Parallel Context Encoding”. *In Proceedings of the 62nd Annual Meeting of the Association for Computational Linguistics (ACL), 2024*. [Paper] [Code]
6. Ryan Liu, **Howard Yen**, Raja Marjeh, Thomas L. Griffiths, and Ranjay Krishna. “Optimizing Interpersonal Communication by Simulating Audiences with Large Language Models”. *Preprint, 2023*. [Paper] [Code]
7. Tianyu Gao, **Howard Yen**, Jiatong Yu, and Danqi Chen. “Enabling Large Language Models to Generate Text with Citations”. *In Proceedings of the Conference on Empirical Methods in Natural Language Processing (EMNLP), 2023*. [Paper] [Code]
8. **Howard Yen**, Tianyu Gao, Jinhyuk Lee, and Danqi Chen. “MoQA: Benchmarking Multi-Type Open-Domain Question Answering”. *In Proceedings of the 3rd Workshop on Dialogue and Conversational Question Answering (DialDoc) @ ACL, 2023*. [Paper] [Code]

\* denotes equal contribution.

## INDUSTRY EXPERIENCE

---

### Meta Reality Labs

Seattle, Washington

Software Engineering Intern

Summer 2022

- Improved automatic speech recognition generalization with semantic-aware speech augmentation
- Investigated data augmentation techniques, such as pauses, word duplication, and semantic-aware phrase replacement, for training end-to-end automatic speech recognition and natural language understanding models. Our method achieved up to a 1% improvement on the Spoken Task Oriented Parsing (STOP) dataset.

### Facebook AI Applied Research

Menlo Park, California

Software Engineering Intern

Summer 2021

- Generalization of gradient approximation algorithms on downstream tasks
- Analyzed gradient approximation algorithms, such as FetchSGD, for vision and language downstream tasks. We achieved more than 80% reduction in communication costs with less than 5% performance drop on CIFAR10, CelebA, and Sent140.

## TEACHING

---

- **Graduate Teaching Assistant** at Princeton University Spring 2024  
*Natural Language Processing (COS484)*
- **Graduate Teaching Assistant** at Princeton University Fall 2023  
*Introduction to Machine Learning (COS324)*
- **Research Instructor** at Princeton University Summer 2023  
*Princeton AI4ALL Summer Camp*
- **Undergraduate Course Assistant** at Princeton University Spring 2022, Spring 2023  
*Natural Language Processing (COS484)*
- **Undergraduate Course Assistant** at Princeton University Spring 2020 – Fall 2022  
*Algorithms and Data Structures (COS226)*

## SCHOLARSHIPS AND AWARDS

---

- Tau Beta Pi 2023
- Sigma Xi 2023
- Sigma Xi Book Award 2023
- Phi Beta Kappa 2022–2023
- Outstanding Student Teaching Award 2023
- International Collegiate Programming Contest (ICPC) North America Finalist 2021
- Shapiro Prize for Academic Excellence 2021
- Citadel Terminal Live 2nd Place 2020
- North Dallas Toyota Scholarship 2019

## INVITED TALK

---

- NVIDIA, “HELMET: How to Evaluate Long-Context Language Models Effectively and Thoroughly” 2024/10
- Sierra.AI, “Enabling Large Language Models to Generate Text with Citations” 2023/08