Website: https://cecilialeiqi.github.io/

Google Scholar: https://scholar.google.com/citations?user=kGOgaowAAAAJ&hl=en

Email: qilei@princeton.edu

## Professional Experience

New York University, NY, United States

September 2022 -

• Assistant Professor in Mathematics and Data Science, Courant Institute of Mathematical Sciences and the Center for Data Science

Princeton University, NJ, United States

July 2020 - August 2022

- Associate Research Scholar and Postdoc Research Associate (CIFellow), Electrical and Computer Engineering Department
- Mentor: Jason D. Lee

Institute for Advanced Study, Princeton, NJ, United States

September 2019 - July 2020

• Visiting Graduate Student for the "Special Year on Optimization, Statistics, and Theoretical Machine Learning"

Simons Institute, Berkeley, CA, United States

May 2019 - August 2019

• Research Fellow for the Foundations of Deep Learning Program

Amazon/A9 Product Search

May 2017 - August 2017

• Inline search suggestions

Amazon Web Services (AWS Deep Learning Team)

January 2017 - April 2017

• Deep Learning Tutorial

## Education

University of Texas at Austin, TX, United States

August 2014 - May 2020

- Ph.D., Oden Institute for Computational Sciences and Engineering
- Advisors: Alexandros G. Dimakis and Inderjit S. Dhillon

## Selected Publications (\* indicates $\alpha$ - $\beta$ order)

- 1. Jianwei Li, **Qi Lei**, Wei Cheng, Dongkuan Xu. "Towards Robust Pruning: An Adaptive Knowledge-Retention Pruning Strategy for Language Models", *To appear at EMNLP conference*, 2023
- 2. Zihan Wang, Jason Lee, **Qi Lei**. "Reconstructing Training Data from Model Gradient, Provably", AISTATS 2023: 6595-6612
- 3. Jason D. Lee\*, **Qi Lei**\*, Nikunj Saunshi\*, Jiacheng Zhuo\*, "Predicting What You Already Know Helps: Provable Self-Supervised Learning", *NeurIPS 2021:* 309-323
- 4. Simon S. Du\*, Wei Hu\*, Sham M. Kakade\*, Jason D. Lee\*, **Qi Lei**\*. "Few-Shot Learning via Learning the Representation, Provably", *ICLR*), 2021
- 5. **Qi Lei**, Ajil Jalal, Inderjit S. Dhillon, Alexandros G. Dimakis. "Inverting Deep Generative models, One layer at a time", *NeurIPS 2019: 13910-13919*
- Qi Lei, Lingfei Wu, Pin-Yu Chen, Alexandros G. Dimakis, Inderjit S. Dhillon, Michael Witbrock. "Discrete Adversarial Attacks and Submodular Optimization with Applications to Text Classification", MLSys 2019 (covered by Nature News)