

THOMAS P. ZOLLO

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EDUCATION

- 1/2023 - Present **Ph.D., Computer Science** *Columbia University*
Advised by Dr. Richard Zemel, GPA: 4.3
- 9/2021 - 12/2022 **M.Sc., Computer Science** *Columbia University*
Specialization in Machine Learning, GPA: 4.3
Earned highest GPA and recognized as top student in cohort at graduation
- 2012-13, 2020-21 **Computer Science** *New York University*
Non-degree student, GPA: 3.9
- 9/2007 - 5/2011 **A.B., Economics** *Harvard University*
GPA: 3.6

PROFESSIONAL EXPERIENCE

- 5/2021 - 6/2022 **Machine Learning Engineer** *Headspace*
Designed, implemented, and deployed first production machine learning system in company history, employing a state of the art transformer architecture to serve recommendations to millions of users daily.
- 11/2014 - 1/2020 **Founder, CEO** *Harbor Road Music*
Founder and director of full-service music talent management firm. Built and managed careers of popular musicians, growing client revenues above \$1M annually.

HONORS AND AWARDS

- **Jonathan L. Gross Award for Academic Excellence** Columbia University Department of Computer Science, May 2023
- **Spotlight Paper Award** Conference on Neural Information Processing Systems (Neurips), December 2023

PUBLICATIONS

Thomas Zollo, Todd Morrill, Zhun Deng, Jake Snell, Toniann Pitassi, Richard Zemel. (2023). Prompt Risk Control: A Rigorous Framework for Responsible Deployment of Large Language Models. Published in *Conference on Neural Information Processing Systems (NeurIPS)*, *Workshop on Socially Responsible Language Modelling Research*. Under review at *International Conference on Learning Representations (ICLR)*.

Thomas Zollo, Zhun Deng, Jake Snell, Toniann Pitassi, Richard Zemel. (2023). Making Predictors More Reliable with Selective Recalibration. Under review at *International Conference on Learning Representations (ICLR)*.

Zhun Deng, **Thomas Zollo**, Jake Snell, Toniann Pitassi, Richard Zemel. (2023). Distribution-Free Statistical Dispersion Control for Societal Applications. Spotlight Award at *Conference on Neural Information Processing Systems (NeurIPS)*.

Jake Snell, **Thomas Zollo**, Zhun Deng, Toniann Pitassi, Richard Zemel. (2022). Quantile Risk Control: A Flexible Framework for Bounding the Probability of High-Loss Predictions. Published in *International Conference on Learning Representations (ICLR)*.

Jake Snell, **Thomas Zollo**, Richard Zemel. (2022). VaR-Control: Bounding the Probability of High Loss Predictions. Published in *International Conference on Machine Learning (ICML), Workshop on Distribution Free Uncertainty Quantification*.

RESEARCH EXPERIENCE

4/2022 - Present **Zemel Group** *Columbia University*

Advised by Dr. Richard Zemel with a focus on developing methods for responsible machine learning, in particular with respect to uncertainty quantification, distribution shift, and algorithmic fairness.

1/2022 - 12/2022 **NLP Group** *Columbia University*

Advised by Dr. Kathleen McKeown with a focus on few-shot learning, meta-learning, and cross-lingual generalization.

9/2021 - 1/2022 **Digital Video and Multimedia Lab** *Columbia University*

Advised by Dr. Chris Thomas with a focus on multi-modal learning and sentiment analysis.

SKILLS AND QUALIFICATIONS

Technical Skills

Python, PyTorch, Transformers, sklearn, numpy, pandas, SQL, Spark, Linux, Docker, AWS

Certifications

National Ski Patrol Level 1 Avalanche: Foundations, Safety and Rescue

COMMUNITY SERVICE

2020 - Present **Group Leader** *Midnight Run*

Schedule, plan, and lead regular delivery missions of food and supplies to homeless residents of New York City.

1998 - 2014 **Volunteer** *Midnight Run*

Collect, pack, and deliver food, clothing, and supplies directly to homeless residents of New York City.

EXTRACURRICULAR ACTIVITY

2007 - 2009 **Varsity Baseball** *Harvard University*

Member of Division I baseball team.