# Toyota Technological Institute at Chicago, Chicago, IL2021 – 2023M.S. in Computer Science (Machine Learning), GPA: 3.46/4.02021 – 2023Courses: Graduate Algorithms, Theory of Machine Learning, Fundamentals of Deep Learning, Convex Optimization

**Cornell University,** Ithaca, NY B.S. in Computer Science (Honors) and Applied Math, *summa cum laude*, GPA: 4.13/4.3

Courses: Foundations of Modern Machine Learning, Matrix Computations, Math Foundations of Information Age

## Publications

- [1] Anmol Kabra, Mina Karzand, Tosca Lechner, Nathan Srebro, and Serena Wang. Score Design for Multi-Criteria Incentivization. In *Foundations of Responsible Computing (FORC)*, 2024. doi:10.4230/LIPIcs.FORC.2024.8.
- [2] Anmol Kabra and Ethan R. Elenberg. Domain Private Transformers for Multi-Domain Dialog Systems. In *Findings of EMNLP*, 2023. arXiv:2305.14208.
- [3] Gene Li, Junbo Li, Anmol Kabra, Nathan Srebro, Zhaoran Wang, and Zhuoran Yang. Exponential Family Model-Based Reinforcement Learning via Score Matching. In *NeurIPS*, 2022. (Oral award). arXiv:2112.14195.
- [4] Johan Björck, Anmol Kabra, Kilian Q. Weinberger, and Carla P. Gomes. Characterizing the Loss Landscape in Non-Negative Matrix Factorization. In *AAAI*, 2021. doi:10.1609/aaai.v35i8.16836.
- [5] Anmol Kabra, Yexiang Xue, and Carla P. Gomes. GPU-Accelerated Principal-Agent Game for Scalable Citizen Science. In COMPASS, 2019. doi:10.1145/3314344.3332495.

# Experience

## Bloomberg LP, New York, NY

Machine Learning Quant Intern

• Leveraging reinforcement learning and transformers for quantitative trading strategies.

## ASAPP, New York, NY

- Research Engineer/Research Intern
- Conducted research on differentially-private training for Large Language Models (LLMs).
- Led a pilot project on real-time anomaly detection, interfacing between internal research and client's engineering teams.
- Designed prototypes for dialog similarity visualization and tab-key autocompletion, which was incorporated in the flagship product AutoCompose.

## eCornell, Ithaca, NY

Course Facilitator

• Revised Cornell University's online Machine Learning certificate course CIS-53x for industry professionals.

## Computational Sustainability Lab, Cornell University

Research Assistant

• Developed neural-network-based models to reduce data sampling bias in eBird, a worldwide citizen science program. The models learned citizens' behavior and optimized incentives >800x faster compared to the previous state-of-the-art on fixed time-budget.



# Education

2016 - 2020

Jun 2024 – Present

May 2021 - Aug 2021

May 2019 - Aug 2021, Aug 2022 - Sep 2022

Jun 2017 – May 2020

# Dept. of Civil Engineering, IIT, Guwahati

2019

Research Intern

- Analyzed feasibility of Waste-to-Energy conversion in Patna, India in a group of 5 high school students.
- Project was recognized by India's Prime Minister and state authorities, and was featured in a national event aired live.

# Honors and Scholarships

• Best Poster Award, Annual Student Workshop, TTIC	2022
• Visiting Graduate Student, Simons Institute for the Theory of Computing, University of California, Berkeley Attended the summer cluster on Interpretable Machine Learning and Deep Learning Theory.	2022
• Attendee, Princeton Machine Learning Theory Summer School, Princeton University	2022
• Merrill Presidential Scholar, Cornell University Awarded university's highest undergraduate honor, given to the top 1% of the graduating class.	2020
• Computer Science Prize for Academic Excellence, Dept. of Computer Science, Cornell University Awarded department's highest undergraduate honor for research and academic work.	2020
• Young Researcher, Heidelberg Laureate Forum Foundation, Heidelberg Selected among 200 undergraduate and graduate students worldwide in Computer Science and Math to attend the	2019 e Forum.
• Top 10% Performance Award, ACM Summer School on HPC for AI and Dedicated Applications, Barcelona Received scholarship to attend the Summer School; adjudged outstanding among ≈50 undergraduate and graduate	2019 te students.
• Statistics Award & Sponsor Award by Air Liquide, BOOM, Dept. of Computer Science, Cornell University Received 2 out of 13 awards for undergraduate research project.	2019
• Outstanding Poster Presenter, Ivy League Undergraduate Research Symposium, University of Pennsylvania	2019
• Tau Beta Pi Engineering Honor Society, Cornell University	2018-20
• Telluride Scholarship, Telluride Association Received room and board scholarship at Cornell University.	2017-20
• Dean's List, Cornell University	2016-20
• Tata Scholarship, Cornell University Received scholarship to attend Cornell University, covering all expenses.	2016-20
• National Talent Search Scholarship, NCERT, Govt. of India	2015-16
• Live video conference with India's Prime Minister, Narendra Modi, Ministry of HRD, Govt. of India Selected among 9 students across India to interact with India's Prime Minister.	2015
<ul> <li>Child Scientist, IIT, Kharagpur, Dept. of Science &amp; Technology, Govt. of India Project on Waste-to-Energy conversion adjudged among top 20 in 1000+ projects nationwide.</li> </ul>	2013

# **Teaching and Service**

## Journals and Conferences

Reviewer: Journal of Machine Learning Research (2023) Volunteer: NeurIPS (2021)

## Teaching

Teaching Assistant, Toyota Technological Institute at Chicago

•	TTIC 31020: Introduction to Machine Learning (graduate-level)	2022
	Wrote assignments and held recitations/tutorials (in rotation with other Teaching Assistants).	

Teaching Assistant, Cornell University

•	CS 4850: Mathematical Foundations of the Information Age (Outstanding TA Award)	2019-20
	Managed course logistics, ran exam review sessions, answered student questions, and graded exams and assignments.	

• CS 3220: Computational Mathematics for Computer Science Answered student questions, evaluated group projects, and graded exams and assignments.

CS 3110: Data Structures and Functional Programming (Outstanding TA Award)	2019	
Taught biweekly discussion sections, evaluated group projects, and graded exams and assignments.		
CS 2800: Discrete Structures	2017	
Answered student questions, and graded exams and assignments.		
Volunteering		
Math Circles of Chicago: Volunteer	2023-Present	
Assist K-12 students in math problems.		
GirlsWhoCode chapter at Chicago Public Library-Coleman Branch: Facilitator	2023	
Facilitated project-oriented coding sessions for K-12 students in a 10-week program.		
Cornell University		
Association of Computer Science Undergraduates: Research Lead	2017-19	
Managed research initiatives for undergrads, organized general-body meetings, and conducted introductory coding workshops.		
Telluride House: President and Chair of Admissions	2017-20	
Chaired housemeetings, committees, and outreach events in the co-op, and managed the COVID-19 pandemic	response.	
Cornell Cup Robotics Team: CS sub-team Lead	2017	
Led the swarm robot sub-team, which was featured by Cornell Engineering in World Maker Faire 2017.		