Henry Josephson

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EDUCATION

The University of Chicago

Chicago, IL, Class of 2025

- Double major: Data Science B.S. and Philosophy B.A. (intensive track, ethics focus). 3.99/4.0 GPA,
- Dean's list every year. Robert Maynard Hutchins Scholar, Georgiana Simpson Scholar in Humanities, Enrico Fermi Scholar in Physical Sciences, all for academic excellence. Elected to Phi Beta Kappa after third year.

Work, Research, and Leadership Experience

Office of Alex Bores, New York State Assemblyman: Legislative Aide

Summer 2023

- Researched and drafted legislation on emerging technology (e-bikes, biotech, AI), communicated, collaborated, and liaised with constituents, advocacy groups, and regulatory agencies, organized community outreach.
- Independently built a comprehensive statistical model with open-source data analyzing e-bike collision trends over a three-year period in response to the assemblymember's expressed need for quantitative risk assessment.
- Data I uncovered during this self-driven research led to a bill (A08450) that was signed into law in July 2024.
- Produced an in-depth report with statistics and policy recommendations (pdf) that was covered by multiple networks (FOX5NY, NY1), demonstrating impact and public interest in the findings.
- Demonstrated the risks of deepfake technology by fine-tuning a state-of-the-art voice cloning model on Asm. Bores' voice with his full consent, raising awareness of the heightened misinformation risk public figures face.

University of Chicago, XLab: Research Manager, Summer Research Fellow Summer 2022, October 2024-present

- Lead the AI policy working group, coordinating agile groups as we write reports answering key questions (are mandatory evals politically feasible? How should policymakers understand the relationship between compute advances and algorithmic improvements?) for researchers at organizations like Epoch and the Institute for AI Policy and Strategy.
- Researched whether potential California regulations on AI can *de facto* apply outside CA. Mentored by Cullen O'Keefe, then at OpenAI, now the Institute for Law & AI's Director of Research.
- Won a prize in the Centre for Governance of Artificial Intelligence's 2022 Student Essay Contest for my paper <u>A California Effect for Artificial Intelligence</u>.

University of Chicago, Harris School of Public Policy: Research & Teaching Assistant February 2024 – present

- TA: first undergrad chosen to TA AI For Public Policy, blending mathematical understanding with practical.
- RA: Work on a team of 4 to analyze whether gunshot detection technology decreases the rate at which people die from gunshot wounds NBER working paper forthcoming, preprint accepted at UChicago / LSE Conference on the Economics of Crime and Justice with an op-ed and responses in the Chicago Tribune.
- RA: Led ML analysis of prison therapy recordings using NLP and time series methods to improve mental health interventions for incarcerated individuals, supporting criminal justice research by Prof. Jens Ludwig.

University of Chicago, The College: Teaching Assistant

September 2023 - June 2024

- First undergraduate TA in the history of the Philosophy department, helping Prof. Ray Briggs teach Bayesian Epistemology, exploring the advantages and issues of representing knowledge with numerical degrees of belief.
- Selected as TA from >600 students in Data Sci. and Statistics depts. to TA Intro to Data Science (4x) and Computer Sci. for Data Sci. Noted for my ability to introduce complex topics to smart but uninitiated students.

Morningstar: Machine Learning Intern

September 2024 – present

- Working for Morningstar, a financial analysis firm, to cheaply improve model performance on low-data tasks
 with state-of-the-art techniques like low-rank adaptation and p-tuning, built a bespoke combination of the two.
- Built synthetic data generation and filtration pipeline, achieving performance comparable to an all-original dataset with a 90%-synthetic dataset..

The New York Times: crossword constructor, The Chicago Maroon: Head Crossword Editor 2022 – present

- Build crossword puzzles for the *New York Times*, where they've been solved by >2,500,000 people. Top critics chose a puzzle of mine as one of 2024's best puzzles.
- Lead a team of 6 to create weekly puzzles for the *Chicago Maroon*'s print & online editions (Read about us here).
- Founded, emceed, and created puzzles for annual crossword tournaments, attracting 350+ solvers over 3 years.

SKILLS & INTERESTS

Blogging at henryjosephson.com, building State Legislator Effectiveness Dashboard to quantify legislators' ability to get their bills enacted • Fluent in French, SQL, Python, AWS • Replicating ML papers • Competitive crossword solving