

## interests

deep learning and formal methods, steerable generative models, music, LLM's

## about

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## languages

native English  
proficient in Hebrew

## programming

Python (including  
PyTorch and Jax), Julia,  
C, Matlab, Haskell

## education

- 2017– **PhD Candidate, Computer Science** University of Pennsylvania  
Awarded the Chateaubriand Fellowship for Humanities and Social Sciences
- 2014–2017 **B.A. magna cum laude, Computer Science** New York University  
Awarded the Faculty Memorial Prize, the Computer Science Prize, and the Computer Science Prize for Outstanding Performance in Computer Science
- 2013–2014 **B.A. Candidate** University of Chicago  
Awarded the Lilian Gertrude Selz Prize

## teaching experience

- 2020-2021 **University of Pennsylvania**  
TA in Graduate Artificial Intelligence, Head TA in Graduate Applied Machine Learning
- 2016 **New York University** Graduate Fundamental Algorithms Tutor (hired by NYU)

## work experience

- 2019-2020 **Riffit** Software Engineer/Researcher  
Performed research in automated music production for therapeutic purposes leading to a patent
- 2021-Present **Google Brain/Magenta** Research Intern  
Developed controllable generative music models using novel machine learning methods

## selected publications

- Jan. 2019 **Learning Neurosymbolic Generative Models via Program Synthesis**  
Joint work with Osbert Bastani and Mayur Naik, Published in ICML 2019 proceedings  
Developed generative models based on latent structures detectable via program synthesis
- July 2021 **Compositional Steering of Music Transformers** Joint work with Jesse Engel, Vincent Dumoulin, Pablo Castro, and Anna Huang. Published in HAI-GEN 2022  
Developed a novel way to steer a music transformer without manipulating its parameters
- November 2022 **Neurosymbolic Deep Generative Models for Sequence Data with Relational Constraints** Joint work with Osbert Bastani and Maxwell Du. Published in NEURIPS 2022  
Developed a way of measuring and producing meaningful global coherence in the context of domains such as music and poetry

## Other Professional Engagements

ACM-W (Society for Women in Computing) chapter co-founder at UChicago.  
2018 FARM (International Workshop on Functional Art, Music, Modelling and Design), 2021 PLIE Program Committee Member

