RYAN FRIBERG

Contact

703.475.4517

ryan-friberg in

Education

New York, NY

GPA 4.03/4.00

Chicago, IL

ryanfriberg.com [®]

Columbia University

MS in Computer Science

The University of Chicago

BS in Computer Science

Summa Cum Laude

Specialization – ML

BA in Astrophysics

A Machine Learning Research Scientist and Engineer with significant proven experience with artificial intelligence and machine learning in many interdisciplinary settings. Rooted in a robust mathematical foundation, my expertise spans the full machine learning stack as demonstrated by responsibilities such as building production-level predictive modeling and active learning platforms. My software has had meaningful impact by enabling novel machine learning functionalities, accelerating early-stage drug discovery efforts, and reducing computation costs. The driving factor of my career is a passion to address the challenging unsolved problems with the highest potential return in improving human lives.

Experience

Machine Learning Research Scientist

Odyssey Therapeutics

Since January 2024

- Architected and implemented core components of Odyssey's production machine learning infrastructure, enabling an ecosystem of software tools and platforms.
- Helped establish best practices for internal software development and model building.
- Regularly liaised between stakeholders to align project scopes and development roadmaps, ensuring effort is consistently focused on the highest value contributions.
- Co-developed the end-to-end, predictive modeling platform, streamlining and modularizing the model building pipeline, with features like full parameter optimization.
- Led the development of the active learning platform, built on top of the predictive platform, accelerating workflows such as virtual screening, reducing data labeling costs, and adding support for vastly larger chemical spaces (100M+ compounds).
- Unlocked capabilities such as rapid model prototyping and easy deployment and greatly expanded Odyssey's ability to leverage machine learning for drug discovery.

Odyssey Therapeutics

May 2023 - December 2023

- Led a research project investigating the applications of deep learning in drug discovery including diffusion-based machine learning pipelines.
- Explored innovative contemporary approaches to include molecular structural information to the learning and generative processes.

Teaching Assistant - Creative Machines and Innovative Instrumentation March 2022 - June 2022 The University of Chicago Department of Physics

Machine Learning Research Assistant

Machine Learning Research Scientist (Intern)

The University of Chicago Department of Computer Science

Fall 2021

• Researched the use of machine learning in the task of nuclear magnetic resonance spectroscopy system identification.

Software Development Intern

IBM Summer 2021

 Refactored IBM's API Connect's testing automation platform and developed a new pipeline for the platform to improve the deployment process.

Jeff Metcalf Scholar Research Assistant

Hong Kong University Department of Astrophysics

Summer 2020

Software Engineering Intern

Icomera AB | Gothenburg, Sweden Summer 2019

Research Assistant

Georgetown University Department of Neurobiology September 2017 – January 2018

Software Engineering Intern

BroadSoft (now Cisco) Summer 2015 and 2016

Skills

C/C++

Computer Vision

Cuda

Deep Learning NLP

Python

PyTorch

Rust

Scikit-Learn

TensorFlow/Keras

Proficient in:

Swedish French

Japanese

Basic knowledge:

Korean