

PATRICK LAVICTOIRE

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EDUCATION

University of California, Berkeley

2005-2010

Ph.D. in Mathematics

Advisor: Michael Christ

Thesis: Pointwise Ergodic Theorems for Nonconventional L^1 Averages

University of Chicago

2001-2005

B.A. in Mathematics

EXPERIENCE

Upstart

2022-

Machine Learning Manager

San Mateo, CA

- I lead the ML Partnerships team, which generates the loan terms Upstart advertises on partner sites (like Credit Karma, LendingTree, NerdWallet, etc) by modeling the terms an applicant would get on-site (but using only the features available to us via the partner site). This team drives a substantial part of Upstart's revenue.

Apple

2020-2022

ML Engineer / ML Engineering Manager

Cupertino, CA

- I first worked on, and then led, the team responsible for ensuring the factual accuracy of Siri's knowledge base as it updates in real time from sources across the Internet.

Lyft

2017-2020

Research Scientist

San Francisco, CA

- I developed machine learning models to predict driver location from noisy sensor data, and to predict fraudulent behavior.

Machine Intelligence Research Institute

2017-2020

Research Fellow

Berkeley, CA

- MIRI is the oldest major AI safety organization. I did theoretical work on the foundations of agency and the challenges of alignment for ML models.

Quixey

2013-2014

Principal Engineer

Mountain View, CA

- Quixey was an app search startup; I developed ML models that improved search relevance.

University of Wisconsin, Madison

2010-2013

Visiting Assistant Professor

Madison, WI

- I continued my research from my Ph.D. and taught undergraduates.

LANGUAGES AND TOOLS

Python, Java, numpy, pandas, scikit-learn, TensorFlow, SQL

PUBLICATIONS AND GRANTS

- Alignment for Advanced Machine Learning Systems** 2016
- Ethics of Artificial Intelligence, 342-382. With J. Taylor, E. Yudkowsky, and A. Critch.
- Program Equilibrium in the Prisoner's Dilemma via Löb's Theorem** 2014
- Workshops at the Twenty-Eighth AAAI Conference on Artificial Intelligence. With B. Fallenstein, E. Yudkowsky, M. Barasz, P. Christiano, and M. Herreshoff.
- Multivariable averaging on sparse sets** 2014
- Transactions of the AMS 366, 2975-3025. With A. Parrish and J. Rosenblatt.
- National Science Foundation, Analysis Grant** 2012-2013
- DMS-1201314
- Pointwise Convergence for Subsequences of Weighted Averages** 2011
- Colloquium Mathematicum 124, 157-168
- Universally L^1 -Bad Arithmetic Sequences** 2011
- Journal d'Analyse Mathématique 113 (2011, no. 1), 241-263
- An L^1 Ergodic Theorem for Sparse Random Subsequences** 2009
- Mathematical Research Letters 16, no. 5, 849-859.