Yannik Pitcan

CONTACT INFORMATION

Phone: +1 407 267 8890
Email: yannik@pitcan.me

EDUCATION

University of California, Berkeley, Berkeley, California, United States

Ph.D. in Statistics **2013-2021**

- Dissertation: An Assortment of Analyses for Optimal Transport Inspired by Domain Adaptation.
- Proved two new sample complexity bounds on the generalization errors of statistical methods using techniques from empirical process theory and proposed another type of distance measure called Sliced Multi-Marginal Wasserstein.

Harvard University, Cambridge, Massachusetts, United States

A.B. ***cum laude*** *with Honors in Mathematics* **2007-2011**

- Honors Thesis: *Quantitative bounds for Markov chain convergence using logarithmic sobolev inequalities*

PROFESSIONAL EXPERIENCE

PerformanceStar, Santa Clara, CA

Software Engineer **November 2022 – Present**

Core contributor to the XAI (explainable AI) project that assists humans in understanding and interpreting the decisions made by AI.

- Built out regression library for XAI.
- Also developed a method for estimating Shapley values in time series data.

Quantfury LLC, Chicago, Illinois

Machine Learning Researcher **Jan 2022 – June 2022**

Lead data engineering as well as modeling activities and effectively manage research program. Design survival analysis models and accurately assess key factors for trades to support overall trading strategy. Develop ML modules, algorithms, and analytical solutions as per research problems. Conceptualize required data pipelines in support of machine learning modules and deploy models in production environment for large-scale apps. Source, cleanse, and analyze large disparate data sets and devise as well as maintain data science best practices across all departments. Collaborate with cross-functional teams to build comprehensive solutions.

- Created survival analysis models to analyze driving factors for trades closing ultimately as part of a larger trading strategy.

Walgreens Boots Alliance, Chicago, Illinois

Senior Algorithms and Engineering Scientist **Sept 2020 – Dec 2021**

Managed Big Data project by effectively collaborating with RX analytics and "Return to Stock" teams. Supported "Return to Stock" project by developing full model pipelines for data engineering/analytics in Azure Databricks. Built and managed algorithms during product development and support integration

into applications. Researched into potential improvements to further optimize algorithm efficiency.

- Created feature store that reduced time other data scientists across the company spent on feature engineering by 30 percent based on metrics.
- Rewrote model pipelines in Pyspark to run on distributed cloud clusters instead of on premises and improved scalability for the Return to Stock project so models could run on workloads ten times larger. Recognized company-wide for work done.
- Revamped hiring processes and built outreach program with UC Berkeley to recruit under-represented minorities in STEM for careers at Walgreens.

Epic Systems, Madison, Wisconsin

Business Intelligence Developer **July 2012 – Aug 2013**

Designed business intelligence solutions as invaluable part of "Beacon Oncology Research and Development" team. Consulted with clients and utilized data analytics and technology to translate data into useful insights and optimize healthcare delivery. Enforced control over all aspects of project from business requirements analysis and programming to interface design and documentation. Interpreted data into business terms and formats for use in other departments.

- Developed analytics dashboards presently in use throughout Epic Systems to accurately assess different metrics.
- Data insights identified a key trend that decreased diagnostic errors by oncology specialists by an average of 10 percent.

COMPUTER SKILLS: R, Python, Spark, SQL, C/C++, Matlab, Scala

OTHER SPECIALTIES: Time series, survival analysis, regression modeling, big data