EDUCATION

Stanford University, Stanford, CA

M.A. and Ph.D. in Economics, 2014 and 2021

· Concentrations: Industrial Economics, Corporate Finance, and Entrepreneurship & Innovation Northwestern University, Evanston, IL

B.A. in Economics, Mathematics, and Mathematical Methods in Social Sciences, 2012

SKILLS

- · Languages & Aptitudes: Python (Pandas, NumPy, Scikit-Learn, Statsmodels, PySpark, etc.), SQL, Stata, Matlab, R, C, Go, Solidity, JavaScript/HTML/CSS, Vue, Git, Databricks, Tableau
- · Machine Learning: regression (linear, trees, neural nets, etc.), classification, clustering
- · Empirical Economics: causal inference, structural models, quantitative marketing, experimentation

Professional EXPERIENCE

Economy Design Lead/Economist (Contract) at The Sandbox, April 2024 - Present

· Led **product management** for game mechanics, economy, and monetization of web3 games/platform

Senior Economy Designer/Economist at Pixelberry, Los Altos, CA, March 2023 - March 2024

- · Led **product management** for the economy/monetization features of interactive story game and UGC platform and data initiatives, aimed at improving conversion/retention and ensuring stable economies
- · Led the design and analysis of surveys, A/B testing, and measurements to extract insights from heterogeneous responses and treatment effects, guiding product features, live ops, and monetization
- · Created dashboards to monitor game economies and user behavior, facilitating data-driven decisions
- · Developed user cohort & behavior analytics frameworks and churn prediction models to derive actionable insights, leading to increased conversion, improved retention, and enhanced user experience
- · Led feature engineering, improving data quality, and clustering and dimensionality reduction for user **segmentation** and **personalization**, enhancing marketing/UA, reengagement, and retention
- · Led data-driven IAP pricing, financial modeling, and forecasting to support strategic decisions

Economist at Alloy and Reach, Boston, MA, March 2022 - March 2023

- · Led **product management** for the design of monetization and incentive models; the mechanics of tokens, NFTs, and smart contracts; tokenomics; and web3 gaming platform and marketplace
- · Collaborated with producers, designers, and engineers, resulting in successful MVP/beta launch
- · Led data science initiatives in data pipelines, data dashboards, prescriptive analytics, and pricing
- · Led financial modeling, forecasting, and data-driven decision support in marketing and fundraising
- · Advised indie gaming studios on monetization and economy design, fostering stronger partnerships

Data scientist at Retina AI, Santa Monica, CA, September 2021 - January 2022

- · Diagnosed and improved product pipelines in feature engineering and recency, frequency, & monetary value (RFM), dimensionality reduction, clustering and other statistical models
- · Automated internal model training (param tuning & cross-validation), leading to higher efficiency
- · Developed and productized cohort analysis using Gelbach decomposition to disentangle the impact of consumer attributes on cohort heterogeneity in purchase patterns, garnering positive client feedback
- · Developed and productized feature selection (Lasso and boosting trees) to identify the relative importance across consumer attributes in explaining Customer Lifetime Value (CLV)

Academic RESEARCH

- "Venture Capital Investment and the Role of Traction: Evidence from Mobile Entrepreneurship," 2021
- · Studied causal inference in VC's investment decision and dynamics with panel data of startups
- · Estimated hazard model with control function approach (instrument var, MLE, bootstrap)
- · 2018 Kauffman fellowship (top 15 entrepreneurship dissertations), 2017 Shultz fellowship (Stanford)
- "Relative Performance Evaluation in CEO Turnovers," 2018
- · Studied causal inference in corporate board behavior, the evaluation and turnovers of CEOs
- · Devised novel quasi-experimental approach and estimated 2SLS regressions (instrument var)
- "Monetization Strategy Innovation in the Mobile Application Market," 2016
- · Examined adoption tendency and impacts of mobile app's novel monetization strategies