

Allen Wu
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EDUCATION

Stanford University <i>MS, Management Science & Engineering. GPA: 3.92/4.00.</i>	Stanford, CA 2016 – 2018
University of Chicago <i>BA, Mathematics. GPA: 3.89/4.00.</i> <i>Honors: Phi Beta Kappa, Dean's List, National Merit Scholarship</i>	Chicago, IL 2011 – 2015

EXPERIENCE

BitGo <i>Data Engineer</i> <ul style="list-style-type: none">• Analytics Database: Lead development of a Node ETL pipeline and PostgreSQL data warehouse to facilitate greater, faster, and more secure access to key business data.• KPI Reporting: Worked with product and business stakeholders to build dashboards gauging BitGo's KPIs, spanning system balance to transaction flow to user activity.• Specialized Queries: Fulfilled time-sensitive data pulls to satisfy legal requests and financial audits, in preparation for board meetings, and to diagnose billing errors.	Palo Alto, CA 2018 – 2019
Wizards of the Coast <i>Game Design Contractor</i> <ul style="list-style-type: none">• Play Design: Developed new expansions for Magic: the Gathering, a strategy card game played by over 10 million people worldwide. Worked in a 10-person team to maximize fun, competitive balance, and replayability.• Challenger Decks: Lead design of the inaugural Challenger Decks series, a successful product line providing new players an entry point into competitive play.	Renton, WA 2017 – 2018
Stanford <i>Course Assistant, Introduction to Decision Making</i> <ul style="list-style-type: none">• Teaching: Wrote and graded homework assignments and exams, held office hours, and advised students on their course projects applying decision analysis tools in consultation with real business partners.	Stanford, CA Summer 2017

PROJECTS

Probabilistic Risk Analysis of Colorado Wildfires <ul style="list-style-type: none">• Collaborated with public officials, wildfire experts, and firefighters to determine the costs and benefits of implementing the International Wildland-Urban Interface Codes in Jefferson County, Colorado.• Designed and implemented a Markov time-series model to predict wildfire behavior and damages.	Spring 2018
SBA Loan Risk Analysis <ul style="list-style-type: none">• Cleaned data sets, evaluated modeling approaches, and researched financial tooling to predict loan default rates, ultimately assessing the riskiness of asset-backed securities.• Implemented linear and logistic regression, a hazard rate model, and a basic neural network, comparing the predictions, accuracy, and sensitivity of the different approaches.	Winter 2017
Playing Blackjack with Deep Q-Learning <ul style="list-style-type: none">• Implemented a blackjack state-machine, following casino conventions.• Constructed and trained a deep Q-network in PyTorch to learn the optimal policy for playing blackjack.	Winter 2017

SKILLS

Fluent: Excel, SQL, Python (NumPy, SciPy, PyTorch, Pandas, Matplotlib)
Conversational: NodeJS, Java, Clojure, Julia, TensorFlow, R, Stata, Spark, Mandarin
Communication: \LaTeX , Markdown, Office

INTERESTS

Magic: the Gathering

- Winner of PT 25th Anniversary, GP Albuquerque 2016, GP Cleveland 2019, and GP Las Vegas 2019.
- Ranked #1 on the live Elo leaderboard with a rating of 2303, earning \$152,050 from 2018-2020.
- Co-lead a team of 20+ players to solve complex strategic and statistical problems in narrow time frames.
- Top-level competition demands composure facing high stakes, volatility, and incomplete information.