

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>	Palo Alto, CA 2018 – 2019
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- **Analytics Database:** Developed and maintained a business analytics database and accompanying ETL pipeline to facilitate faster, more adaptive business and product analytics via sanitized and curated platform data.
- **Business Metrics Reporting:** Built reporting infrastructure and designed dashboards to measure BitGo's business health, spanning system balance to transaction flow to user activity.
- **Data Requests:** Fulfilled time-sensitive data requests to facilitate board presentations, enable product managers, diagnose billing errors, respond to legal inquiries and financial audits, and more.

Wizards of the Coast <i>Game Design Contractor</i>	Renton, WA 2017 – 2018
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- **Game Development:** Provided insight on the entertainment value, competitive balance, and replayability of new expansions for Magic: the Gathering, a strategy card game played by over 10 million people.
- **Challenger Decks:** Principally designed the 2018 Challenger Decks series, a popular product aimed to give aspiring competitive players an affordable entry point into tournament play.

Stanford <i>Course Assistant, Introduction to Decision Making</i>	Stanford, CA Summer 2017
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- **Teaching:** Wrote and graded homework assignments and exams, held office hours, and advised students on a course project to apply the tools taught in class in consultation with real business partners.

PROJECTS

Probabilistic Risk Analysis of Colorado Wildfires	Spring 2018
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- Worked 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.

SBA Loan Risk Analysis	Winter 2017
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- Explored and cleaned data sets, evaluated different modeling approaches, and researched financial tooling to predict loan default rates and assess the riskiness of asset-backed securities.
- Implemented linear and logistic regression, a hazard rate model, and a basic neural network, comparing the accuracy, sensitivity, and specificity of the different methods.

Playing Blackjack with Deep Q-Learning	Winter 2017
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- Implemented a blackjack state-machine following typical casino conventions.
- Constructed and trained a deep Q -network in PyTorch to try to learn the optimal policy for blackjack.

SKILLS

Fluent: Python (NumPy, SciPy, PyTorch, Pandas, Matplotlib), SQL

Conversational: NodeJS, Java, Clojure, Julia, TensorFlow, R, Stata, Spark, Mandarin

Communication: L^AT_EX, Markdown, Google Suite, Microsoft Office

INTERESTS

Magic: the Gathering

- Winner of PT 25th Anniversary, GP Albuquerque 2016, GP Cleveland 2019, and GP Las Vegas 2019.
- Currently ranked #4 on the live Elo leaderboard, with a rating of 2215.
- Built models to analyze tournament results, improve in-game decision-making, and forecast player behavior.
- Published articles on channelfireball.com and hareruyamtg.com, two of the top Magic content websites.