Allen Wu

Palo Alto, CA

Email: nalkpas@gmail.com
Mobile: (505) 920-4664

EDUCATION

Stanford University Stanford, CA
MS, Management Science & Engineering. GPA: 3.92/4.00. *2016 – 2018*

University of Chicago Chicago, IL
BA, Mathematics. GPA: 3.89/4.00. *2011 – 2015*
Honors: Phi Beta Kappa, Dean's List, National Merit Scholarship

EXPERIENCE

BitGo Palo Alto, CA
Data Engineer *2018 – 2019*

- **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 Renton, WA
Game Design Contractor *2017 – 2018*

- **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.
- **Analytics**: Built tools to consolidate internal testing, analyze card files, interpret tournament results, and more.

Stanford Stanford, CA
Course Assistant, Introduction to Decision Making *Summer 2017*

- **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*

- 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.

Playing Blackjack with Deep Q-Learning *Winter 2017*

- 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.

Magic: the Gathering Hand Simulation *Winter 2017*

- Developed a Monte Carlo simulation framework for generating and interpreting opening hands, using it to determine how consistent particular decks are and to find optimal deck configurations.

SKILLS

Fluent: Python (NumPy, SciPy, PyTorch, Pandas, Matplotlib), SQL
Conversational: NodeJS, Java, Clojure, Julia, TensorFlow, R, Stata, Spark, Mandarin
Communication: LaTeX, 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 #2 on the live Elo leaderboard, with a rating of 2267.
- 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.