Wanqi Zhu

Stanford 2021 | wanqizhu@stanford.edu github.com/wanqizhu | linkedin.com/in/wanqizhu

EDUCATION

STANFORD UNIVERSITY

Computer Science, Theory Track 2017 - 2021

COURSEWORK

Parallel Programming
Computer Networking
Advanced Data Structures
Randomized Algorithms
Principles in Computer Systems
Operating Systems
Compilers
Research Topics in Cryptography
Deep Learning

PROJECTS

FIGGIE.IO A MULTIPLAYER ONLINE PLATFORM FOR THE MARKET MAKING GAME FIGGIE.

PYFUCK AN ORIGINAL ESOTERIC PROGRAMMING LANGUAGE. INSPIRED BY JSFUCK.

HLTEX A CUSTOM SCRIPTING LANGUAGE ON TOP OF LATEX, SUPPORTING INLINE MATPLOTLIB FIGURES AND PYTHON SCRIPTING.

COINTK A BITCOIN TRADING BACKTESTING & ANALYSIS TOOLKIT. HACKILLINOIS WINNER.

MTG ENGINE A PYTHON GAME ENGINE FOR THE TURING-COMPLETE RULES OF MAGIC THE GATHERING.

SKILLS

>5000 lines: Python • C++ • numpy/pandas/matplotlib

>1000 lines:

C • OCaml • Ruby on Rails • tensorflow • pytorch

EXPERIENCE

JANE STREET | QUANTITATIVE RESEARCH

Sept 2021 - Present | New York, NY

LYFT | ECONOMIST INTERN

Jun - Aug 2020 | San Francisco, CA

- Applied Two Stage Least Squares (2SLS), Quantile Regression and XGBoost (ML) to analyze millions of ride data, teasing out casual relationships.
- **Proposed two improvements** in elasticity estimation, a key component in the ride pricing model, and validated my hypotheses using historical data.

JANE STREET | QUANTITATIVE RESEARCH INTERN

Jun - Aug 2019 | New York, NY

IMPROBABLE | Software Engineering Intern

Jun - Sep 2018 | London, UK

• Built >2000 lines custom C++ networking code on top of Unreal Engine 4, enabling multi-server AI and player transitions.

AURA HEALTH | Machine Learning Intern

Feb - Jun 2018 | San Francisco, CA

• Built a data analytics pipeline and deployed a SVD recommendation engine.

TREECTF | LEAD ORGANIZER

Oct 2017 - Feb 2018 | Stanford, CA

- Designed and built Stanford's first Capture the Flag cybersecurity competition.
- Led a team of four to run the competition with 27 problems and 10+ teams.

WILLOWFLARE | Co-FOUNDER AND CTO

2015 - 2017 | Chicago, IL

- Built an end-to-end webapp in Ruby on Rails with thousands of users.
- Won \$10000 in UChicago Booth's New Venture Challenge.

TA & GRADER	2015-18
Organizer	2018
SOCIAL CHAIR	2019
SECTION LEADER	2018-19

RESEARCH

STANFORD THEORY GROUP Spring 2019 | Stanford, CA

Worked with Aviad Rubinstein to implement and scale the Competitive Equilibrium with Approximate Equal Incomes algorithm, used at Wharton business school.

UCHICAGO COMPUTATION INSTITUTE Summer 2016 | Chicago, IL

Developed machine learning algorithms for topic labeling and author disambiguation.

PUBLICATIONS

[1] X. H. Yang, W. Zhu, et al. Systematic computation with functional gene-sets among leukemic and hematopoietic stem cells reveals a favorable prognostic signature for acute myeloid leukemia. *BMC Bioinformatics*, 2015.