DAVID (YUNXIN) ZHANG

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EDUCATION

Cornell University

Aug 2019 - May 2020

• Master of Engineering in Computer Science

GPA: 3.94

University of Illinois at Urbana-Champaign

Aug 2015 - May 2019

• Bachelor of Science in Mathematics and Computer Science

GPA: 4.0

SKILLS

Programming Languages

• C++, Java, Python, C, Kotlin, SQL, HTML, CSS, JavaScript, Haskell

Development Tools

• Git, Jenkins CI/CD, Vim, Unix, IntelliJ Platform

PROFESSIONAL EXPERIENCE

Citadel | Citadel Securities

Aug 2020 - Present

Quantitative Developer

- Completed a rigorous two-month academic training in statistics, Python and C++, and finance.
- Rotated at Enterprise Data. Delivered reference data pipelines and ETL tools for Citadel/Citadel Securities. Tech Stack: Python, Perl, Airflow, K8s, SQL Server
- Full-time placement at Fixed Income Market Making. Developing quant library, risk models, and quote execution systems that support interest rate swaps and US treasury trading.

Tech Stack: C++, Python

Verizon Media (Yahoo)

May 2018 - Aug 2018

Data Engineer Intern

- Interned at **Data Highway** team that facilitates big data transportation in the scale of two petabytes per day.
- Designed and programmed a web service that reports event counts and data loss with **Jetty** and **Redis**.
- Iteratively tested and deployed the web service to multiple hosts across Verizon with **Chef** automation.
- The service was capable of tracking over 2000 events per second and was ready for use in production.

PROJECTS

Algebraic Graph Algorithms

May 2019 - Aug 2019

- Joined the research group in **parallel computing** mentored by Prof. Edgar Solomonik from UIUC.
- Designed, implemented, and benchmarked several parallel algebraic algorithms for graph connectivity.
- Outperformed previous work, Shiloach-Vishkin algorithm, by more than 20% on Stampede2 Supercomputer.

Weather Forecast Analysis

Sep 2016 - May 2017

- Collected 10GB of weather data automatically in **Python** and **Shell Script** with **Cron** for 4000 locations.
- Built Persistence, Climatology, Multiple Linear Regression, Time Series ARMA(3, 3) models in R.
- Created interactive climate maps with **heatmap.js** and Google **Fusion Tables** for **data visualization**.
- Achieved **close accuracy** for 5-12 day forecasts compared to professional forecast providers online.

HONORS

- Honorable Mention (top 20% of all participants)

 The Mathematical Contest in Modeling, Apr 2017
- Outstanding Poster (top 15% of over 300 poster presentations)

 Joint Mathematics Meetings, Jan 2017