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++ programming, and finance.
- Rotated at Enterprise Data Ingestion. Delivered 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 risk models and quote execution 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**.

EnterpriseWorks *May 2017 - Aug 2017*
Web Developer Intern
- Maintained **Salesforce** database, and constructed web applications with **Visualforce** and **Apex**.
- Developed and deployed **over 10** websites for startup companies with **Bootstrap**, **jQuery**, and **D3.js**.
- Collaborated with designers and clients, quickly **prototyped** websites, and received great feedbacks.

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 Supercompputer.

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*