DAVID (YUNXIN) ZHANG

 $(217)721-5700 \diamond yz2578@cornell.edu \diamond github.com/yx-z$

EDUCATION

Cornell University, Cornell Tech

Aug 2019 - May 2020

• Master of Engineering in Computer Science

University of Illinois at Urbana-Champaign

Aug 2015 - May 2019

• Bachelor of Science in Mathematics and Computer Science

GPA: 4.0/4.0

PROFESSIONAL EXPERIENCES

Laboratory for Parallel Numerical Algorithms

May 2019 - Present

Research Assistant

- An ongoing research on **Scientific Computing** mentored by Prof. Edgar Solomonik from UIUC.
- Designed, implemented, and benchmarked several parallel algebraic graph algorithms for connectivity.
- Outperformed previous work, Shiloach-Vishkin algorithm, by more than 20% on Stampede2 Supercompputer.

Verizon Media (Yahoo)

May 2018 - Aug 2018

Data Engineer Intern

- Worked in **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 2000+ events per second and was ready for use in production.

${\bf EnterpriseWorks--Research\ Park}$

Apr 2017 - Oct 2017

Web Developer

- 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

Pedway Navigation

Feb 2019 - May 2019

- Built a Chicago navigation Android app that specifically takes the underground walkway, Pedway, in routes.
- Joined as the backend lead and decided the backend tech stack, Express Server, MongoDB, and Jest.
- Designed, developed, and tested **RESTful** APIs in **Agile** method with iteration meetings and CI/CD.

Weather Forecast Analysis

Sep 2016 - May 2017

- Collected 10+GB of weather data automatically in **Python** and **Shell Script** with **Cron** for 4000+ locations.
- Built Climatology, Multiple Linear Regression and other statistical models in R programming language.
- 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 for (top 15% of 300+ poster presentations)

 Joint Mathematics Meetings, Jan 2017

SKILLS

Programming Languages

• Java, Python, Kotlin, C, C++, JavaScript, Haskell, Ocaml, SQL

Development Tools

• IntelliJ IDEA and JetBrains IDEs, Git, Vim, Android Studio, Unix