

William Xinze Zheng

✉ xinzez2@illinois.edu  williamxz.com  Google Scholar  xinze-zheng

Education

University of Illinois Urbana-Champaign <i>BS in Computer Science & Statistics minor in Mathematics</i>	Sep 2022 – Dec 2025 GPA: 4.0/4.0
University of Melbourne <i>BS in Electrical Engineering & Computer Science</i>	Mar 2021 – May 2022 GPA: 93.2/100

Publications

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- [1] **William X. Zheng**, Aryan Taneja, Maleeha Masood, Anirudh Sabnis, Ramesh Sitaraman, Deepak Vasisht. “StarCDN: Moving Content Delivery Networks to Space.” *To appear in ACM Special Interest Group on Data Communication Conference (SIGCOMM '25)*, September 2025.
 - [2] Anna Mazhar, Saad Sher Alam, **William X. Zheng**, Yinfang Chen, Suman Nath, Tianyin Xu. “Fidelity of Cloud Emulators: The Imitation Game of Testing Cloud-based Software.” *IEEE/ACM International Conference on Software Engineering (ICSE '25)*, April 2025.
 - [3] Jiawei Tyler Gu, Zhen Tang, Yiming Su, Bogdan Alexandru Stoica, Xudong Sun, **William X. Zheng**, Yue Zhang, Akond Rahman, Chen Wang, Tianyin Xu. “Who Watches the Watchers? On the Reliability of Softwarizing Cloud Application Management.” *Under review NSDI 2026*

Research Experience

Research Assistant Mentor: Prof. Francis Y. Yan & Prof. Ravi Netravali <i>Edge video conferencing</i> <ul style="list-style-type: none">◦ Researching edge video conferencing paradigm to reduce user-perceived latency and improve bandwidth usage.	Champaign, IL Apr 2025 – Present
Research Assistant Mentor: Prof. Deepak Vasisht & Prof. Ramesh K. Sitaraman <i>Satellite based CDN</i> [1] <ul style="list-style-type: none">◦ Proposed StarCDN, a LEO satellite based CDN architecture that achieves low latency and high bandwidth usage and counters the problem of LEO satellites’ orbital motion and low coverage range.◦ Developed and open-sourced, in collaboration with Akamai, a CDN synthetic trace generator for geographically diverse traffic with theoretically proven cache-level and object-level integrity properties.	Champaign, IL May 2024 – Present
Research Intern Mentor: Prof. Tianyin Xu <i>Cloud Management System Interaction</i> [3] <ul style="list-style-type: none">◦ Studied and understood the challenges in K8s operator’s interaction with users, cloud management platform, and managed systems. <i>Cloud and Emulator Discrepancies</i> [2] <ul style="list-style-type: none">◦ Reasoned fundamental challenges in building reliable cloud service emulators via studying real-world cloud-based applications and fuzzing emulator APIs.◦ Built a testing proxy middleware that automatically detects discrepancies between cloud and emulator APIs and selectively runs application tests on cloud and emulator to achieve high-fidelity testing while minimizing the cost of testing.	Champaign, IL May 2023 - Aug 2024

Employment

Research Assistant

Advisor: Prof. Deepak Vasisht

Champaign, IL
May 2024 – Dec 2025

Course Assistant

CS340 (Intro. Computer System)

Champaign, IL
Jan 2023 - May 2024

CS438 (Communication Networks)

Jan 2025 - May 2025

Awards and Achievement

University of Illinois Urbana-Champaign Dean's List

2022, 2023, 2024

Airwallex Outstanding Undergraduate Student (30k AUD to Top 5 of CS Department)

2022

University of Melbourne Leader in Community Award

2022

University of Melbourne International Student Scholarship

2021