

Xin Tong

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Education

University of Illinois at Urbana-Champaign

Champaign, IL

Master of Computer Science (4.0/4.0)

Aug. 19 - Dec. 20

- Teaching Assistant for CS225 *Data Structures* in Fall 19 and Spring 20; TA for CS425 *Distributed Systems* in Fall 20.

New York University Abu Dhabi

Abu Dhabi, UAE / NYC, NY

B.S. Computer Science (3.977/4.0)

Aug. 15 - May 19

- Graduated *Magna Cum Laude*.

Industry & Research Experience

Facebook

Menlo Park, CA / Champaign, IL

Software Engineer Intern

May. - Aug. 20

- Set up a new base url and implemented a new server and routing scheme for an advertiser-facing product in Ads Measurement org. Launched the project internally (planned for external launch afterwards).
- Applied performance optimization techniques to improve the initial page load time of the product.
- Implemented with ~9k lines of Hacklang(PHP) and JavaScript.

NYUAD Computer Science Department

Abu Dhabi, UAE

Student researcher

Jan. - May 19

- Designed and partially implemented a blockchain-based P2P data storage system with a decentralized storage verification algorithm and a distributed networking stack.
- Wrote a system design white-paper and implemented with ~5k lines of Golang.

Wechat, Tencent

Guangzhou, China

Software Engineering Intern

Jun. - Aug. 18

- Developed real-time, multiplayer game prototypes using the WeChat Mini Game framework and a HTML5 game engine.
- Expanded the WeChat Mini Program/Game client-side library by adding APIs to support networking, file storage and multimedia features, such as VoIP chat.
- Helped solve developer issues on the community forum for three months.

Secure Systems Lab, NYU Tandon

Brooklyn, NY

Summer Research Intern

Jun. - Aug. 17

- Researched and developed a Distributed Hash Table (DHT)-based information advertise and lookup library for *Seattle Testbed*, a cloud computing platform for networking and distributed systems research.
- Followed the BitTorrent BEP5 and BEP44 protocol standards and implemented with ~4k lines of Python.

Personal/School Projects

OS/Distributed Systems

- Implemented Linux kernel modules: Rate-Monotonic CPU Scheduler and Page Fault Profiler
- Implemented a Linux Security Module to execute a system-wide Mandatory Access Control policy
- Implemented a multi-process binary sorting system using Inter-process Communication (IPC) mechanisms [repo]
- Researched and implemented distributed advertise methods for *Seattle RelyV2* Python library [code] [poster]
- Implemented a local mock of the Map Reduce system in Golang [source] [code]

Software Engineering

- Designed and implemented Tandoop, an enhanced version of the Randoop random test generation tool [code]

Technical Skills

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|------------------------------|---|
| Programming Languages | Python, Java, JavaScript, C/C++, Golang, PHP/Hacklang |
| Web Development | React, Node.js(Express), SQL/MySQL, MongoDB, Django, HHVM |
| Miscellaneous | Unix, Bash/zsh, Git, Mercurial, Vim, LaTeX |