Xin Tong

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Education

University of Illinois at Urbana-Champaign   *Champaign, IL*
M.S. Computer Science (4.0/4.0)   *Expected May 21*
- Teaching Assistant for CS225 Data Structures in Fall 19 and Spring 20.

New York University Abu Dhabi   *Abu Dhabi, UAE / NYC, NY*
B.S. Computer Science (3.977/4.0)   *Aug. 15 - May 19*
- Graduated with *Magna Cum Laude*.

Work & Research Experience

Facebook   *Menlo Park, CA / Champaign, IL*
Software Engineer Intern   *May. - Aug. 20*
- Set up a new base path 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 techinques 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

Linux Operating System

- 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]

Distributed System

- Researched and implemented distributed advertise methods for Seattle *RepyV2* Python library [code] [poster]
- Implemented a local mock of the Map Reduce system in Golang [source] [code]

Technical Skills

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