

Xin(Cynthia) Tong

Actively seeking Software Engineering Internships for summer, 2020

☎ (260)239-2318 | ✉ cynthiatong18@gmail.com | 📧 tongxin97 | 🌐 xin-cynthia-tong-470bbb86/

Education

University of Illinois at Urbana-Champaign

Champaign, IL

M.S. Computer Science

Expected May 21

- Teaching Assistant for CS225 *Data Structures* in Fall 19.

New York University Abu Dhabi

Abu Dhabi, UAE / NYC, NY

B.S. Computer Science

Aug. 15 - May 19

- Magna Cum Laude (3.977 / 4.0 GPA)

Skills & Coursework

Programming Languages	proficient Python, Java, JavaScript (ES6)	familiar C/C++, Golang, GLSL, LaTeX
Web/Big-Data Frameworks	React, Node.js (Express), WebGL, Spark	
Environments/Tools	Unix, Bash, Git, Vim, Eclipse, Jupyter, VS Code	
Lab-based Coursework	Foundations of Data Science, OS, Dynamic Web Applications, Computer Graphics	

Work & Research Experience

Undergraduate Thesis on Blockchain-based P2P Storage System

Abu Dhabi, UAE

Student researcher

Jan. - May 19

- Designed and partially implemented a blockchain-based P2P data storage system with a decentralized storage verification scheme and networking stack. The storage system is going to support a decentralized online forum application, where each user has the ability to post and moderate content.
- Wrote a system design white-paper (to be published); implemented with ~5k lines of Golang.

Web Development at WeChat Mini Program Center, Tencent

Guangzhou, China

Software Engineering Intern

Jun. - Aug. 18

- Developed real-time, multiplayer game prototypes using the WeChat Mini Game framework and LayaBox HTML5 game engine. Games are designed so that players join and team up from group chats, boosting the communal experience.
- Expanded the WeChat Mini Program/Game client-side library by adding APIs to support networking, file storage and multimedia features, such as VoIP chat. Developed feature-testing prototypes that cover each added API.
- Helped solve developer issues on the community forum for three months.

P2P Networking Research at Secure Systems Lab, NYU Tandon

New York, 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; Implemented with ~4k lines of Python.

Pre-College Computer Science Education at Bigger Lab (Startup)

Shanghai, China

Teaching Staff

Jun. - Aug. 16

- Co-taught two classes on Arduino hardware/software and the Processing Java graphics library (15-20 high school students per 2-week class).
- Hosted biweekly coding workshops in collaboration with hacker spaces in Shanghai.

Open Source Projects

- 2019 Noise, a lightweight p2p networking stack in Golang (*forked*) [code]
- 2018 Operating Systems class projects [code]
- 2018 Chordinate, a React Native app for practicing chord progressions [code]
- 2018 Web Development for *the Gazelle*, student publication website at NYUAD [contributions]
- 2017 Advertise DHT, distributed advertise methods for *Seattle Repv2* library [code] [poster]
- 2017 Acamaniac, an academic schedule planner for NYUAD students [code] [demo]