Xin (Cynthia) Tong

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Education

New York University Abu Dhabi   Graduating May 19

B.S. Computer Science, minors in Applied Mathematics and Interactive Media
Major GPA: 4.00/4.00   Cumulative GPA: 3.93
Recipient of four-year full scholarship. Based in Abu Dhabi (15-16, 18-19) and New York (17).

Technical Skills

Programming Languages: [proficient] Java, Python, JavaScript (ES6)   [knowledge] C, C++
Web Dev: HTML5 & CSS3, React, Node.js (Express)   **Visualization Libraries:** p5.js, D3.js, Three.js
Dev Tools: Linux, Git, Vim

Work Experience

Secure Systems Lab (SSL), New York University   Summer Research Intern   📍 New York   June – Aug 17
- Contributed to *Seattle Testbed*, an open-source cloud computing platform for networking and distributed systems research, by developing a data advertisement and lookup system with Distributed Hash Table (DHT)

BiggerLab (必果科技)   Tech Intern, Instructor   📍 Shanghai   June – Aug 16
- Taught and wrote tutorials on Arduino and Processing at the Shanghai-based startup
- Collaborated with maker spaces such as Xin Chejian (新车间) on organizing coding workshops

Projects & Hackathon

BitTorrent Distributed Hash Table (DHT)   June – Aug 17
- Implemented a BitTorrent Distributed Hash Table (DHT) in Python for *Seattle Testbed*
- Practiced socket programming; established UDP connections with public BitTorrent tracker nodes
- Ported and used the ed25519 public key system and SHA-512 crypto hash algorithm
- Followed OOP principles and developed unit tests for DHT components

The Gazelle (https://thegazelle.org)   Oct 17 – Feb 18
- Member of the web development team at the Gazelle, NYU Abu Dhabi weekly student publication
- Contributed to the Gazelle websites' React and Node.js codebase

Dynamic Web Projects   Jan – May 17
- Built websites using React and Vue.js, Node-Express backend and small databases
- Practiced web scraping with Python Flask and data visualization with p5.js and D3.js

NYUAD Hackathon First Place   Nov 16
- Contributed to building a site that calculates users' carbon footprint based on their past travel destinations
- Built the back-end and database with Node.js; co-designed the front-end layout

Relevant Coursework

CS: Data Structures, Algorithms, Computer Systems, OS, Computer Networks, Software Engineering
Math: Discrete Mathematics, Linear Algebra, Calculus with Application, Multivariable Calculus
Web: Mashups: Creating with Web APIs, Dynamic Web Applications, Drawing on the Web

Additional Info

Languages: English (TOEFL 115), Mandarin
Personal Interests: Basketball, Wood Craft/Sculpture, Holiday Work Exchange