# Ruolin Zheng

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## **EDUCATION**

#### THE UNIVERSITY OF CHICAGO

Chicago, United States Expected, December 2020

Bachelor of Science in Computer Science, Bachelor of Arts in Statistics

GPA: 3.95/4.00, Dean's List 2017 - 2018

Honors

UChicago STEM Summer Research Grant (\$1000, awarded to fewer than 10% of the applicants)

2018

Top 1% distinction in the Avogadro Chemistry Exam (ranked 6th out of over 1000 participants)

2016

## RELATED COURSEWORK

Introduction to Computer Systems, Introduction to Software Development, Computational Linguistics, Honors Discrete Mathematics, Networks and Distributed Systems, Statistical Models and Methods; (Expected) Theory of Algorithms, Introduction to Formal Languages, Machine Learning, Machine Learning and Large-Scale Data Analysis

## **EXPERIENCE**

**Nomad Credit** 

Chicago, United States

Front-End Web Development Intern

October 2018 – present

- Develop web application with Ruby on Rails in Docker containers. Monitor site performance with Google Analytics
- Optimized CSS for mobile compatibility. Compressed 150+ images and achieved a 50% increase in Page Load Speed
- Improve User Experience on the application form page by eliminating 5 bugs related to validation errors

UChicago STEM Education CANON Lab (Computing for ANyONe) Summer Research Curriculum Development & Research Intern

Chicago, United States June 2018 – August 2018

- Developed Computer Science curriculums themed in Science, Math and Culture in Scratch (visual programming language)
- Automated Scratch project grading process with JavaScript and researched teaching strategies on Computational Thinking
- Implemented Robot Turtles (Coding Board Game for children) Online Game in HTML/JavaScript and collected data

CryptoClub Cryptography Education Project Quality Assurance Testing Quality Assurance (QA) Tester

Chicago, United States June 2018 – August 2018

Identified, documented and reported bugs for CryptoClub cryptography educational project website, tools and game

Shenzhen Energy Group Co., Ltd., Information Technology Branch Externship

Shenzhen, China December 2017

- Learned basic access control, budgets, accounting process, finance reports and human resources management principles
- Received basic training in the System Applications and Productions (SAP) and the Office Automation (OA) software

## **ACTIVITIES**

# UChicago TechTeam

Chicago, United States

Junior Program Development Chair & Project Team Member

January 2018 – present

- Lead weekly workshops on Git, Terminal, HTML/CSS/JavaScript, API's, Python Web Scraping and Data Analysis
- Supervise quarter-long Civic Technology projects for Chicagoan Non-profits such as the Northwest Side Housing Center

#### **PROJECTS**

# Multi-threaded FTP Client & High-throughput HTTP Crawler Python

October 2018 – December 2018

- Developed a multi-threaded, high-performance FTP client that downloads a file from distributed servers
- Implemented a multi-threaded, shared-cookies HTTP crawler to overcome the server's per-flow and per-user rate limit **Full Text Search** *C, Redis, GitHub: https://github.com/cmsc22000-project-2018/fulltext*March 2018 June 2018

• Created a tool for the user to interactively navigate a file and search for keyword(s). Also supports search with a batch file

Built upon the Redis Trie data structure provided by the Trie team and the API team. Collaborated over GitHub and Slack

Searchable Map HTML/CSS/JavaScript, Demo: https://lucha.org/health-wellness-resource-hub January 2018 – March 2018

- Built a searchable, filterable map from a template to display a list of health resources in a Google Fusion Table
- Standardized and categorized the data. Integrated Google API's for Geocoding. Customized filters and pins in CSS/JS Smart Luggage Case "BoVo" Demo: https://www.youtube.com/watch?v=nQbGU2BlWRk July 2016 August 2016
- Built a smart luggage case with an auto-brake system. Incorporated 3D-printed wheel-locks, Arduino boards and sensors
- Designed an Android APP that connects to the luggage case via Bluetooth for remote identification with light and sound

#### SKILLS

Languages: Proficient in C and Python; Basic in JavaScript, HTML, CSS, Ruby on Rails, R, SQL

Technologies: Proficient in Git, Microsoft Office, Microsoft Excel; Basic in Linux, Docker, Bootstrap, Node.js, AutoCAD