

Qianwen (Tiffany) Zheng

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EDUCATION

Williams College, Williamstown, MA

Bachelor of Arts in Computer Science and Mathematics, expected 2020

Cumulative GPA: 3.72/4.00 (*Dean's List*)

Relevant Coursework: *Computer Science:* Data Structures, Computer Organization, Principles of Programming Languages, Human-Computer Interaction; *Math/Stat:* Multivariable Calculus, Linear Algebra, Discrete Mathematics, Statistics and Data Analysis; *Economics:* Intro to Microeconomics, Intro to Macroeconomics.

Foreign Languages: Spanish (Intermediate, received DELE B1 Certificate), Mandarin (Intermediate, spoken), Cantonese (Intermediate, spoken), Patois dialect (fluent).

Skills: Java, Python, C, x86 Assembly, Lisp, Standard ML, R, Bash, Git, HTML/CSS, Adobe Illustrator.

WORK EXPERIENCE

Teaching Assistant, *Computer Science Department, Williams College*

Spring 2017 - Present

For introductory computer science courses with Java (Digital Communication & Computation; Objects, Events, and Graphics): instruct students in programming assignments and offer academic support outside of class hours.

Student Technology Consultant, *Office for Information Technology, Williams College*

August 2017 – Present

Assist students, staff, and faculty in resolving computer, printer, and network related issues.

Developer Intern, *AKALA (Education-Tech Startup), Los Angeles*

January 2018

Helped their software engineering team to manage databases on their web-platform using Django and to improve the site's user interface.

Research Assistant, *Computer Science Department, Williams College (Advisor: Tom Murtagh)*

June-August 2017

Worked with Prof. Tom Murtagh to develop a log-structured file system for NAND memory; implemented key functions and crucial infrastructure including a library consisting of a virtual NAND memory and a tool to initialize the file system.

SERVICE AND LEADERSHIP ACTIVITIES

Advisor, *Google IgniteCS*

Spring 2017 – Present

Provide mentorship and teach coding to local high school students.

Board Member, *Underrepresented Identities in Computer Science (UnICS)*

Spring 2017 - Present

Raise awareness about minority students' experiences in the department, work with faculty to improve diversity and inclusion, organize weekly dinners, workshops, a peer-mentoring program, and campus events.

Treasurer, *Students of Caribbean Ancestry*

Spring 2017 – Present

Manage club budget and financial transactions, maintain financial records, issue funding requests.

International Orientation Leader (IOL), *Williams College*

Summer 2017

Worked with other IOLs to plan and execute an orientation program for incoming international students and served as a mentor to international first years.

Fundraising Coordinator & Volunteer, *NYC Youth Outreach*

Spring 2017

Raised money by organizing campus fundraisers and events to fund a spring break service trip with a group of Williams students to promote literacy in children at Bellevue Hospital, NYC, by reading to young patients before their appointments.

PROJECTS

Assembly Interpreter: Worked with a partner to build a virtual assembly interpreter using an Intel x86-64 based instruction set to store, decode, and execute instructions from programs written in an ARM based assembly language. This implementation involved much optimization work in considering the trade-off between run time and memory footprint.

Police Audio Monitor: Worked with a team at HackAmherst 2018 to build a web platform to monitor streaming police audio for keywords/phrases chosen by the user (eg. names of places and people they care about); my primary role was building the back end with Flask and employing Google's Cloud Speech API for transcribing audio to text that we could parse. Link: <https://devpost.com/software/campusear>.