

# Qianwen (Tiffany) Zheng

3018 Paresky Ctr., Williamstown, MA 01267 \* qz3@williams.edu \* (917) 859-7421  
tiffany-zheng.com

## 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>.