Frederick V. Qiu

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EDUCATION

Princeton University, College of Arts and Sciences   **Princeton, NJ**
Candidate for Bachelor of Arts in Computer Science   *May 2023*
- SAT: 1600/1600
- Relevant Courses: Advanced Algorithm Design (Grad. Course), Graph Algorithms & Data Structures (Grad. Course), Theory of Algorithms, Algorithms & Data Structures, Intro to Programming Systems, Honors Linear Algebra, Classical Mechanics

PROFESSIONAL EXPERIENCE

Qualytics   **Warminster, PA**
Web Developer and Data Interpreter   *Jun 2020 – Present*
- Built a website from scratch using HTML, CSS, JavaScript, PHP, and MySQL
- Implemented secure login system and a system for clients to submit requests for NMR tests on samples
- Interpreted NMR test data to identify chemical structure of samples for clients
- Third author in paper published in Tetrahedron Letters

IQVIA (Quintiles & IMS Health)   **Plymouth Meeting, PA**
Student Intern   *Jul 2019 – Aug 2019*
- Deployed a proof-of-concept for clinical trial software as a low-cost alternative to conventional methods offered by companies such IBM (potential savings estimated at around $1.5 million) using Java, JavaScript, Excel, and XML
- Completed 8-week long project 6 weeks ahead of schedule and presented to senior officers; project later presented as a case study to the Systems Development group globally (July 2020)
- Implemented SSIS packages using MS SQL to export tables to fixed-width text files
- Created Java package to automatically map SQL cube attributes to SQL table columns from an XML definition file

Independent Research   **Bluebell, PA**
First Author   *Jun 2017 – Jan 2018*
- Conducted statistics research on public opinion regarding pollution and economic growth in China with Professor Zuyi Huang
- Conducted analyses such as Principal Component Analysis on multidimensional datasets (using R)
- Authored a paper in MDPI and presented research at the American Institute of Chemical Engineers Annual Meeting (2018)

EXTRACURRICULAR ACTIVITIES

Computer Science Teaching Assistant   **Princeton, NJ**
Paid Teaching Assistant   *January 2020 – Present*
- Teaching assistant for two courses, Algorithms and Data Structures and Introduction to Programming Systems
- Hold office hours/help sessions for 4 hours a week

Princeton Tutoring   **Princeton, NJ**
Paid Tutor   *November 2019 – Present*
- Tutored high school students for various courses (such as AP Calculus BC) for 1 hour a week

Minecraft Server (Monumenta)   **Doylestown, PA**
Lead Developer   *Dec 2018 – Present*
- Volunteered in an online project to develop a free-to-play, unique MMORPG Minecraft server with 6000+ players
- Developed Java plugins that extend default Minecraft functionalities, contributing 20,000+ lines of code on GitHub

PERSONAL

Skills	Java, Python, JavaScript, C, SQL, PHP, HTML, CSS, R, Chinese (Mandarin)
Interests	Programming, Electronic Music, Video Games, Running
Awards	Dean's List (2020), National Merit Scholarship Finalist (2019), High School Valedictorian (2019)
GitHub Portfolio	Xinfu32.github.io