Peter Zhao

pjz1@williams.edu | 703-889-0678 | pzhao1799.github.io
2810 Morada Ct, Vienna, VA

EDUCATION

Williams College   Williamstown, MA
B.A. Computer Science, B.A. Mathematics. GPA: 3.77/4.00   *Expected June 2021*
   Relevant Coursework: Algorithm Analysis, Computer Architecture, Statistics & Data Analysis, Probability, Graph Theory, Abstract Algebra, Real Analysis, Theory of Computing, Networks and Dynamics, Combinatorial Optimization, Algorithmic Game Theory, Machine Learning

   Study Abroad: Acquincum Institute for Technology in Budapest - Spring 2021

Thomas Jefferson High School for Science and Technology   Alexandria, VA
Advanced Diploma. GPA: 4.23   *Aug 2013 - May 2017*

Harvard Business School, HBX   Cambridge, MA
Credentials of Readiness: Business Analytics, Economics for Managers, Financial Accounting   *June 2018 - Aug 2018*

TECHNICAL SKILLS

- **Languages**: Python, C, C++, Java, JavaScript/TypeScript, Clojure, Go, R, HTML, SQL, Prolog   **Technologies**: Unix, GitHub, LaTeX
- **Libraries**: Numpy, Matplotlib, SciPy, NetworkX, Scikit-Learn, Pandas, Django, React

EXPERIENCE

J.P. Morgan   Chicago, IL
Software Engineering Intern   *June 2020 - Aug 2020*
   ○ Developed social media tools for local nonprofit to boost youth engagement via self-learning social media bots that automatically determined content and sentiment. Increased engagement and click rate by 80% for target group

Williams College Computer Science   Williamstown, MA
Research Intern, Professor Daniel Barowy   *June 2019 - Dec 2019*
   ○ **SWELL**: Researched a self-repairing parser combinator library using TypeScript that can detect syntactic parsing errors, determine a possible fix using minimum edit distance, and return an easy-to-read error message based on error stream
   ○ Created looping structures in the SWELL programming language and constructed locks on direct manipulation if behavior was ambiguous. Implemented a lesson constructor to make lesson development more user-friendly

Williams College Psychology   Williamstown, MA
Research Assistant, Professor Safa Zaki   *Jan 2019 - Dec 2019*
   ○ Implemented modular experiment development procedure by implementing the jsPsych library and organized workflow using GitHub
   ○ Conducted research in categorization tasks via Amazon Turk to determine if blocking or interleaving is better for learning unique individual elements

PROJECTS

- **GoTED**: A Go implementation of the Zhang-Shaha Algorithm, which computes the edit distance between two trees
- **C++uckoo**: A C++ implementation of a Cuckoo Filter using a variety of hashing techniques
- **Firestone**: A Heathstone clone developed in Clojure to focus on functional programming software design paradigms
- **Community Detection**: Implementation and testing of the Girvan-Newman Algorithm in Python for detecting communities in networks

VOLUNTEER EXPERIENCE

Microsoft TEALS
Volunteer   *July 2020 - Present*
   ○ Supported teachers in teaching and developing a fundamental computer science curriculum for high school students to increase access to a tech-focused education

Reboot For Youth   Fairfax, VA
Chief Technology Officer   *Sept 2014 - May 2017*
   ○ Refurbished over 300 computers to donate to low-income students in need to technology for schoolwork
   ○ Partnered with Lenovo, CNN, Nickelodeon, WeddingWire and Keepod for fundraising efforts

ADDITIONAL EXPERIENCE & ACHIEVEMENTS

- **Teaching Assistant** for Algorithm Analysis: Fall 2019
- **Teaching Assistant** for Linear Algebra: Fall 2018
- **Tutor** for Data Structures & Algorithms and Linear Algebra: Spring 2019
- **Treasurer** of All Campus Entertainment at Williams College: 2019-2021
- **President** of the Chinese American Student Association: 2018-2019
- **President** of the Williams Questbridge Chapter: 2018-2019
- Placed **4th** at Google Tech Challenge: Cambridge 2018
- Placed **1st** in Creative Category at HackDartmouth 2017
- Jack Kent Cooke Scholar and Questbridge Scholar
- Conversationally fluent in Chinese and Shanghainese