Ze Yuan (Gavin) Zhang

6340 Main St., Houston, TX 77005 | gavin.zhang@rice.edu | zeyuanzhang.com | +86 156 1124 9244

EDUCATION

Rice University (2019-2023)   Houston, TX
Bachelor of Science in Computer Science
Bachelor of Arts in Computational and Applied Mathematics
Minor in Business
- President's Honor Roll (3.92 GPA)

West Point Grey Academy (2014-2019)   Vancouver, BC
BC Dogwood High School Diploma
- ACT Composite Score: 36

TECHNICAL SKILLS

Software Engineering: Python, Java, MATLAB, HTML, CSS, Javascript, Git
Algorithms & Mathematics: Data Structures and Algorithms, Discrete Mathematics, Program Design, Neural Networks, Clustering Algorithms, Linear Algebra, Operations Research

TEAM EXPERIENCE

Feb 2020 - Aug 2020   **Research Assistant for Dr. Peter J. Varman**   Houston, TX
- Contributed to implementing Fair-EDF, an earliest-deadline-first request scheduler seeking to fulfill the same percentage of requests from different clients
- Predicted SSD response times with a decision tree with 4 nodes per branch
- Accomplished fast training (0.14s on a training set of 5000+ requests, 52000 observations/second) with a 15% error on average on a YACSIM simulated SSD

Sep 2019 - Dec 2020   **Analyst, Rice Undergraduate Investment Fund**   Houston, TX
- Protected return of 44% on stock CLB by pitching to hold rather than sell in the Energy sector

Apr 2016 - 2019   **General Manager, UNA Community Youth Band**   Vancouver, BC
- Designed and updated website unayouthband.org
- Organized 12 concerts, the rehearsal venue, and distribution of volunteer hours to 20+ students

INDIVIDUAL PROJECTS

Dec 2020 - Present   **Physical Guitar Loop Pedal Alternative**   Beijing, China
- Creating a loop pedal web-app compatible with any guitar using Javascript

Dec 2020   **Group-based Distraction Blocker**   Beijing, China
- In a team of 3, created a chrome extension notifying users in the same room when one user is distracted
- Programmed front-end interface, tracking and communicating info with Flask server via socket.io
- Assisted in writing Flask server communicating with rooms, detecting whether a user is distracted via comparing URLs they visit with a list of distracting websites

Dec 2020   **Personal Portfolio Website**   Beijing, China
- Created a responsive website using Bootstrap, jQuery, Modernizr, etc.

Aug - Nov 2020   **Test Set Generator for Python Programs**   Vancouver, BC
- Wrote a Java program to generate a concise set of test cases to catch buggy implementations of a function
- Used recursion to parse config files, generate objects for test cases
- Used greedy algorithm finding minimal hitting set to remove redundant tests

Jun - Jul 2020   **Bluetooth Controllable Table Tennis Serving Robot**   Vancouver, BC
- Produced table tennis serving robot with an app to configure hitting patterns, spins, speeds
- Created an Arduino program and mobile controller application
- Designed a custom circuit using DC and Servo motors, and H-Bridges

ADDITIONAL

Honors & Awards:
Top 3%, Michael Smith Science Challenge (National) (2016)
First Place, $5000 CAD grant for a local non-profit organization, Youth and Philanthropy Initiative (National) (2017)
3rd Place, Distinguished Speaker, WPGA Global Affairs Debate Tournament (Regional) (2018)
PVG Tuition Award for Academic Excellence (Top 4 in grade for high school GPA) (2019)
British Columbia Achievement Scholarship (Top 8000 in province for cumulative GPA) (2019)
References: Available upon request