

## Education

University of California, Riverside Riverside, CA  
 B.S./M.S. Computer Engineering  
 B.S. GPA: 3.64 (University Honor's Program) – Cum Laude August 2015 – December 2019  
 M.S. GPA: 3.78 January 2020 – December 2020

University of Science and Technology of China Hefei, China  
 Summer Camp on Artificial Intelligence July 2019

Yonsei University Seoul, South Korea  
 Summer Study Abroad Program Summer 2017

## Skills

Languages: — (Proficient) C++, C, Python — (Familiar) C#, HTML, CSS, VHDL/Verilog, MATLAB  
 Technologies: — (Proficient) Git, Linux, Unity3D, Atmel AVR — (Familiar) CUDA, Android Studio, Xilinx ISE  
 Coursework: Embedded and Real-Time Systems, Machine Learning, Data Mining Techniques, Artificial Intelligence, GPU Computing, Virtual Reality, Computer Security, High Performance Computing

## Experience

Graduate Teaching Assistant — Senior Design Project in Computer Architecture + Embedded Systems Riverside, CA  
Spring 2020

- Project Manager overseeing 10 teams' large-scale 10-week projects.
- Hosted weekly scrum meetings for teams to gauge progress and advise teams.
- Successful transition to virtual instruction using Trello, Slack, Google Team Drive, GitHub, etc.

Software Research Intern under Dr. Frank Wahid, Co-Founder and CTO [ZyBooks](#) Riverside, CA  
June 2018 – January 2019

- Data analysis on [ZyBooks](#) computer science courses.
- Wrote Python scripts to analyze student exams and submitted code.
- Improved course content based on data and student struggle factors.

## Projects

Relational Database + GUI Project — Stock Trading System December 2021

- Using Python, tkinter and SQLite3 for client/server application.
- Customers/Admins can use GUI for a variety of actions with a custom stock price generator.
- Demo: <https://drive.google.com/file/d/1MDg8PCx9lLkMzOPRMUWIsUPT5BHsel2j/view>

Embedded Systems Project — “Third Eye” Computer Vision Assistance for the Blind Spring 2019

- Using Arduino, Raspberry Pi, ultrasonic sensors, camera, and speakers.
- Obstacle detection, OpenCV for facial recognition and audio cues for user.
- Demo: <https://www.youtube.com/watch?v=aECvIMQX7KI&t=2s>

GPU Project — Dog Breed Classification using TensorFlow and Keras Spring 2019

- Compare 2 separate convolutional neural networks built with only TensorFlow and only Keras.
- Predict dog breeds using the Stanford Dog Dataset as well as personal dog pictures.
- GitHub: <https://github.com/tqazi002/Dog-Breed-Classification>

Virtual Reality Project — “Peaceful Gardening” for Oculus Rift Winter 2019

- Unity3D, C#. Player can move, grab objects to till soil, water plants, time skip, harvest, etc.
- GitHub: <https://github.com/tqazi002/Peaceful-Gardening>

Embedded Systems Project — Clear LCD Touchscreen “Smart Window” weather informer Fall 2018

- Using state machines, microcontroller ATMEGA 1284, weather sensors, and vibration sensor.
- Communication Technologies: SPI, I2C, ADC, USART.
- Demo: <https://www.youtube.com/watch?v=2G9BozYmUe8&t=61s>

## Involvement

Rose Hack 2019 (Hackathon) — Organizer and Volunteer October 2018 – January 2019  
 Organizations: WinC (Women in Computing), ACM (Association for Computing Machinery), Tau Beta Pi

## Awards and Honors

- Edison STEM Scholarship Fund for 2017-2018 Academic Year
- American Honda Scholarship for 2018-2019 Academic Year
- S.L. Gimbel Foundation Scholarship for 2020-2021 Academic Year

Hobbies: Travelling, Judo, Building Model Kits, Working on my '96 Integra