Zijun Zhao

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Education & Training

Washington University in St. Louis   St. Louis, MO, US (09/2017 – 05/2020)

B.S. in *Computer Engineering*, 05/2020

Minor in *General Economics*

GPA: 3.74/4.0 (50% of my courses were graduate level courses)

Honors: Graduated Cum Laude, Dean's List (4 of out 6 semesters: FL2019, SP2019, FL2018, FL2017)

Graduate Level Courses Taken: Data Structures and Algorithms, Introduction to Artificial Intelligence, Introduction to Machine Learning, Operating Systems Organization, Introduction to Computer Networks, Computer Architecture, Computer Systems Design

Horizons School of Technology   San Francisco, CA, US (05/2017 – 07/2017)

- Took the summer training courses and engaged in the learning of website design, mobile/desktop application development, and programming tools such as js, HTML, and React.
- Worked in small groups and individually to implement more than 8 full-stack projects.

E.g., a React-based mobile chat app and an Electron Collaborate text editor, a Slack Schedule Bot, and W!sh, etc.

- Attended events and talks given by top tile tech entrepreneurs, e.g., Keith Rabois (general partner at Founders Fund) and Payal Kadakia (founder & executive chairman at ClassPass).

University of California, Santa Cruz   Santa Cruz, CA, US (09/2016 – 05/2017)

Major in *Computer Engineering*

GPA: 3.88/4.0

Honors: Dean's List (SP2017, WIN2017)

Intern Experience

Research Intern *HILab at Jilin University*   Changchun, Jilin, CHN (09/2020 – Present)

- Used python and aided in the development of machine learning algorithms for biomedical data processing
- Reimplemented the *McTwo* method, which is introduced in the paper *McTwo: a two-step feature selection algorithm based on maximal information coefficient,* and proposed better performing feature selection algorithms for achieving higher classification performance.

Web Content Manager & Developer *Africa Initiative at WUSTL*   MO, US (10/2019 – 05/2020)

- Designed and implemented more than 100 front-end web pages, established standard templates and style guides for future webpage design in the Africa initiative at WUSTL.
- Managed all back-end website contents, including pictures and posts.
- Used js code snippet to customize the web layout designs in Wordpress's templates.
- Modified existing templates to achieve the desired layout and presented the best format to website visitors.

Data Analysis Intern *Jilin University Information Technologies Co., Ltd*

Changchun, Jilin, CHN (05/2018 – 07/2018)

- Mapping entities from multiple databases into a single table using Hibernate.
- Wrote SQL queries to automatically push specified elements from Oracle databases into forms.

Highlighted Projects

The pet project   Changchun, Jilin, CHN (07/2020 – Present)

A slack virtual pet application that integrates a game and a progress tracker. It tracks users' to-do lists, projects' progress and set remainders, it also levels up and stays healthy whenever a task is completed.

- Implemented the slack virtual pet application using js and bolt-js.

- Designed the game concept and the game mechanics, including interactive functions and health/hunger values, to achieve a better gaming experience.
- Lead the team and establish a progress document for the team to track the change history.

3D Rhythm Game   St. Louis, MO, US (02/2020-05/2020)
- Implemented a 3D rhythm game using Unity and C#.
- Lead a group of 4 to design the block pattern that is most suitable for the rhythm of the music.
- Created an innovative game mechanic which allows users to actively switch lanes with the falling bricks instead of passively waiting for the notes to fall.

WashU Combat!   St. Louis, MO, US (09/2019 – 12/2019)
A 2D rouge-like barrage RPG game.
- Implemented using: Unity and C#.
- Led a group of 4 engineers and distributedwork among team members.
- Integrated the environment of Washington University in art and background settings to make the game immersive.

RichArduino   St. Louis, MO, US (01/2019 – 05/2019)
An Arduino-like FPGA project that can connect HDMI and interface with an Arduino Bluetooth shield.
- Implemented using: ExpressPCB and Android Studio.
- Designed the PCB board layout and the schematics.
- Created an Android app that can send and receive messages from the Bluetooth shield.

USocial   Iowa, IA, US (10/08/2018)
A social platform made for UIOWA hackathon, made in 20 hours.
- Implemented using: js, node.js, and MongoDB.
- Created USocial's website, including 3 web pages and login, posting system.

A Short Game About Life   St. Louis, MO, US (10/2018 – 12/2018)
An Android puzzle game.
- Implemented using: Android Studio, Kotlin, and haptic feedback.
- Designed and constructed all levels game using different types of haptic feedback (e.g., shake, rotation)
- Designed and portrayed the art and illustrations of each level.

Ping-pong Auto Picking Robot   Changchun, Jilin, CHN (05/2018 – 07/2018)
A robot that automatically approaches and collects the localized Ping-pong balls using a pipe.
- To recognize and localize Ping-pong balls on the ground in real time, an efficient and effective object detection and instance recognition model was implemented.
- Engaged in the hardware assembling process of the robot (camera and wheels).
- Designed experiments to test the robot's performance in scenarios with different distributions of ping-pong balls and obstacles on the ground.
- Won an award for China National Teen Innovation Contest (http://www.cyscc.org.cn/).

Skills

Programming Languages: HTML, CSS, Java, JavaScript, C#, Python, PHP, SQL, x86 assembly
Operating Systems: Linux, Windows, UNIX
Database Systems: Oracle, MongoDB
Others: node.js, Express, socket.io, Matlab, Wordpress, React, Android App Development, Microsoft family
Language: Chinese, English, Japanese (Intermediate), Korean (Basic)