Ruifeng(Harris) Hua

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SUMMARY OF QUALIFICATION

- Strong understanding of object-oriented programming and web-development by implementing several web applications using JavaScript, GraphQL, React, Apollo and MongoDB Atlas.
- Proficient in both Android and IOS developments through implementing a personal safety app that utilized users' current location and several google APIs written in Java and Swift respectively.
- High proficiency of coding skills using Java, C, C++, Python in microservices, multiprocessing and operating system.
- Solid understanding of algorithms including greedy algorithm, Divide & Conquer algorithm, Dynamic Programming algorithm, Linear Programming algorithm.
- Great understanding of game development resulted in the completion of a third-person shooter using Unity and C# as well as implementing an adventure game with approximately $20000 funds that soon will be on Steam.
- Excellent teamwork and communicational skills develop by being scrum masters of multiple projects.

EDUCATION

Candidate, Honours Bachelor of Science (Co-op)   2018 - Present
University of Toronto Scarborough, Scarborough, ON
Specialist in Computer Science Co-op
Awards: University of Toronto Scarborough Dean's List (2021)
CGPA: 3.6

PROJECTS

Goldfish Girl (adventure game)   Mar 2021 - Present
Small Startup Project

`TypeScript/JavaScript/GameCreator`

- The demo won the second place of 9th City GC Game Creation Competition in China with a $2000 prize held by GameCreator with multiple game producers and scriptwriters as judges.
- Teamed up with professional voice actors and scriptwriters while being the only programmer in the team of five.
- Approximately $20000 funding and will be launched on Steam soon.

Sanctuary (personal safety app on both Android and IOS)   Sept 2021 - Dec 2021
The Startup Sandbox, University of Toronto Scarborough

`Java/Swift/Google APIs/Android APIs/Apple APIs`

- Successfully implemented the app on both Android and IOS with a bare understanding of both Android and IOS developments at first.
- Integrated the app with Google and Apple Maps and multiple Google APIs including Distance Matrix API, Places API and Maps SDK.
- Utilized multiple Android APIs including audio recording, storing data and files, capturing users' current locations, making phone calls, sending SMS messages, foreground, background and accessibility services.
- Multiple Iterations to improve the usability of the app by online questionnaires, interviews and connecting with experts.
- Applied several business strategies including industry and users' analysis, customer validation, value proposition and business model canvas.

Sorting Algo Visualizer (online web application for visualizing sorting algorithms)   Apr 2021 - May 2021
Self-Initiated project

`JavaScript(React)/NodeJS`

- Implemented and deployed an online sorting algorithm visualizer where users can generation different sized array and visualize it by the most commonly used sorting algorithms including merge sort, quick sort etc as well as their time complexity, pseudo-code and the high-level idea of each sorting algorithm for educational purpose.

Danmaku (online web application for video and audio streaming with live commenting)   Jan 2021 - Apr 2021
Programming on the Web, University of Toronto Scarborough

`GraphQL/JavaScript(React)/NodeJS/MongoDB Atlas`

- Learned and obtained a solid understanding of Graphql and utilized it for building the entire server including manipulating cloud database, user input validation and authentication.
- Successfully built an online streaming platform that supports unlimited multiple streaming services including danmaku (floating live commenting) and several other features.

U Impactify (online web application for online education)   Nov 2020 - Dec 2020
Software Design, University of Toronto Scarborough

`JavaScript(Angular)/NodeJS/MongoDB`

- As Scrum Master, utilized agile development to design and implement a web application in a team of six
- Incrementally developed the application with user story and came up with unique features on our own based on feedback.
- Organized and assign different tasks to group members resulting in fast and clean implementation and completion.

Celestial Renegades (Third-Person shooter Unity game)   May 2020 - July 2020
Self-Initiated project

`C#/Unity/AI pathfinding`

- Learned how to code in Unity using C# by watching relevant online videos and successfully implemented the game for the purpose of obtaining a better understanding of different aspects of game development.
- Designed the game mechanism and arts including characters, animation, background, and particle system.
- Integrated with AI pathfinding to improve playability.

Personal Website (online web application for my personal website)   Sept 2019- Nov 2019
Self-Initiated project

`JavaScript/HTML/PHP`

- Built the interactive mode on top of an existing framework by self-learned JavaScript and GitHub.
- Designed the layout and aesthetic of the personal website by a great deal of researching and analyzing feedbacks from others.
- Uploaded all of my notes and my projects as well as corresponding source code and demo video for educational purposes.