# **Qianli** Ma

As a university student who is graduate and has coding experience with Java, Python, and C++. I am eager to build a long-term career or internship in the field of software development as a programmer.

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### Experience

HanHai

### Computer maintenance

FuZhou,China December-2017 - February-2018

Wah Hing

#### **Assistant Kitchen Manager**

Adelaide, SA May-2017 - Present



- Find out the hardware problem with examination and replace with a new one. Build a one-click recovery function for Window OS which fixes OS crush.
- · Manage daily operation under the direction of the kitchen manager
- Maintain inventory, order supplies, and ensure kitchen operation is smooth
- · Training of new employee
- · Coordinate, and assign tasks to the kitchen staff

### Skills

Programming Languages: Java Swing(6 months), Java(3 years) ,HTML(6 months), Python(1 year)

Personal Skills: Ability to work in a team driven environment, Excellent time management skills, Motivated and always willing to lear n new things

A\* search

Search algorithm

**Design patterns** 

Data structure

### Education

University of South Australia

Bachelor of software development

Adelaide
2019



- Relevant Courses: Computer Science Foundation, Software Development with C++, Systems Design, Data Structures(JAVA), Interface Design(JAVA Swing), Web Development(HTML, CSS), Programming Fundamentals(JAVA), Problem Solving and Programming(Python), Programming Fundamentals for Engineers(C)
- · Achieve D for the course of Programming Fundamentals for Engineers
- Achieve D for a C++ assignment of using design patterns
- · Achieve D for assignments of Linklist and Tree

## **Projects**

Professional Project

NATO Reference Mobility Model (NRMM) Generic Terrain Generation Tool

- · The project is work with the Defence Science and Technology Group
- The project is a QGIS(geographic information system) plugin which written in Python
- The system reads a geo-referenced image and divides into 100m grid
- · Each cell in the grid can be selected by mouse
- The system has a method to associate to numbered Land Use(LUSE) type
- The system outputs a file which has land type description selected by the user

#### University assignments

#### **Dungeon Crawler**

- The game is written in C++.
- The game has implemented design patterns of singleton, builder, decorator, and strategy.
- · Design a class hierarchy using UML
- Implement the software design in C++ using class inheritance and polymorphism features.
- Use stream I/O and manipulators for formatted input and output
- Use C++ pointers (including smart pointers) and dynamic memory allocation and management

#### NotePad

- The notepad implemented by Java Swing and it has JFrame as a container. The project has JTextField to hold the name of the file and JtextArea to hold the user's input.
- The project has two Jbutton boutons. The add button and delete button have ActionLister to handle user's action.
- When add button is clicked which create a new notepad next to the current notepad
- · When delete button clicked which delete the current notepad
- The user's input store in a text file which allows a user to reload.

#### PS4 Account

- The project was code with Java and use a tree structure to build a connection between user and account detail, such as friend list, game list, and trophies
- The project implements preorder traversal to add a friend and use in order traversal to remove a friend.
- The project has a customized node to hold the user's information. And each parent nodes have two children.
- A simulation of PS4 account which has the function of add friend removes friend, trophies, and a game list

#### Magic War Game

- The game was a terminal base game which about user against to computer.
- The project implements a customized stack and queues to manage item storage.
- A node of the item has information, such as durability, and damage. The connection of nodes was implemented by LinkedList.

### References

Susannah Wong | Wah Hing Restaurant | Owner

Phone: 08 8212 0338

Shiyun Zhang | Sintelix | Software engineer

Phone: 61422732599

David Sanderson | Defence Science and Technology Group | Operations Research Specialist

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