

Yiming Cai

Los Angeles, CA | caiyimin@usc.edu | (213) 204-0809 | [linkedin.com/in/yimingcai27/](https://www.linkedin.com/in/yimingcai27/) | github.com/CymChristabel

EDUCATION

University of Southern California, Los Angeles, CA
Master of Science, Computer Science

December 2019

Xiamen University, Xiamen, Fujian, China
Bachelor of Technology, Software Engineering

July 2017

Windesheim University of Applied Sciences, Zwolle, Nederland
Erasmus Programme, Application Development

July 2016

TECHNICAL SKILLS

Programming Languages: C++, Java, Python, JavaScript, HTML, SQL

Applications: GIT, Node.js, Angular 2, Unity, VS Code, Sublime Text, Hadoop MapReduce, Solr, MySQL, Oracle, Redis

Methodologies: Scrum

PROJECTS

Palaces - Unity 2D

Spring 2019 - Present

- Collaborated with two graduate students to build a single player, mission oriented 2.5D platform game (Technology: Unity, C#)
- Spearheaded scenes design and mechanism of gameplay
- Managed development schedule and teamwork by Scrum and using Trello for task management

Search Engine.

Fall 2018

- Completed a search engine with snippets extraction and auto suggestion on top of 20k+ crawled websites processed by Hadoop MapReduce for generating Inverted Index. (Technology: Tika, SpellCorrector, Solr; Language: Java, Python, PHP and HTML)

Game Simulation with Artificial Intelligence

Summer 2018

- Created an artificial intelligent agent determines current player's next move by implementing Minimax search with Alpha-Beta Pruning (Language: Python)

English Learning Application

Spring 2017

- Build a student oriented English Learning application with study statistics analysis and visualization. (Technology: Ionic2, Sails.js, Node.js, MySQL, Redis; Language: JavaScript, HTML, CSS)
- Created realtime words searching with autocomplete and study plan based on users' statistics

Students Affair Application

Fall 2017

- Programmed a WeChat mini application as an alternative access port with improved visualization of data (Technology: WeChat mini program, MySQL; Language: JavaScript)
- Reduced time spent on original student affair website by 80%

Billiards Game - OpenGL

Fall 2015

- Developed a billiards game implemented with collision and rotation implemented. (Technology: OpenGL; Language: CPP)

WORK EXPERIENCE

Software Development Intern, SuperBuddy, Zwolle, Nederland

January 2016 - July 2016

- Collaborated with two students and development team to design a customer oriented application using Ionic2
- Liaised with business department to redesigned database schema for business model and search performance. Improved database performance by 60%
- Coded queries using MySQL to check and migrate data in old schema to new one
- Partnered with two developers in implementation of Sails.js as back-end based on new database model
- Cooperated with web developers on switching to new API