

XIANGYU (JOHNNY) WAN

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EDUCATION

University of California, Los Angeles

Expected June 2022

B.A. Computer Science

GPA: 3.95

Coursework: Operating System Principles, Introduction to Algorithms and Complexity, Programming Languages, Introduction to Computer Graphics, Introduction to Machine Learning, Introduction to Formal Languages and Automata Theory, Computer Network Fundamentals, Software Engineering

SKILLS

Programming Languages: C/C++, C#, Java, Python, Javascript

Technical Skills: Game Programming (Unity), Object-oriented Development, Data Structures, Full Stack Web Development (Node.js, React), Embedded Systems (Raspberry, Beaglebone, Arduino), ML Frameworks (Pytorch)

Operating Systems: Linux, Windows

Development Tools: Visual Studio, Visual Studio Code, Git, GDB

PROJECTS

Kyklos | Unity 2D, C#, Side Scroller

- Implemented player controller for 2D side scroller movement, attack, jump, dash, and a flexible skill/effect system, allowed easy addition of new skills and effects, enabled boss interaction with the player including grabbing and throwing.
- Cooperated with teammates to create Zombie's throwing mechanism, allowing the boss to charge at the player and throw him backwards when player keeps dodging away, increasing the boss fight's difficulty.

DataAnalysis_GP | Python, C/C++, Hybrid Programming

- Enabled serial communication, keyboard real-time control, and automatic logging using Arduino, and allowed easy customization of modules for task specific adjustment.
- Constructed experiment system for my Physics 4AL lab team during winter 2020 as substitute for the default toolset, greatly increased lab efficiency.

Bookkeeper | React, Node.js, MangoDB, API, Git

- Produced a web app using react and MongoDB to let users, with identity identified by their accounts, update and review their financial records
- Deployed a server-side program to regularly fetch and pull from git repository, and enabled both frontend and API node programs to automatically restart on update.

Ramen For Two | Unity 2D, C#, Visual Novel

- Made dialogue history and image container for this visual novel, allowed further UI design to build on top of these infrastructure.
- Wrote game manager consisting of settings system and scene manager, that allowed player to adjust music/background volume at title screen and moving from title to main game, and from main game to credit scene.

EXPERIENCE

BSH Home Appliances, Nanjing, People's Republic of China

Jul. 2019 - Sep. 2019

Software Development Intern

- Implemented immediate display and logging of sensor data, real-time data analyzation, and test simulation on a new multipurpose sensor matrix, enabling data collection through experiments. The sensor matrix, deployed in kitchen, enables alarm against burnt food, hence ensures safety and taste of cooking.
- Designed and performed experiments on anti-burnt feature of kitchen sensor matrix. These experiments allowed our team to generate a prototype machine-learning model.
- Developed test report integration tool used with reports generated by automatic test tools and set up automatic database updating and display on internal web server. This shared tool enhances software development teams' ability to follow up with project progress, through integrating multiple sources of reports, and enabled quick reaction to emergency situations.

University of California, Los Angeles, CA, United States

Jan. 2020 - Present

Computer Support Technician

- Troubleshooting software and hardware problems for on campus employees.
- Operated Email system, editing email lists for school organizations frequently to propagate human resource changes.

HONORS & AWARDS

Dean's Honors List

Dec 2018 - Present