

Yi Chen

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Education

University of Southern California , Los Angeles, CA, United States	Aug 2021 - May 2023
<i>Master of Science in Computer Science – Game Development</i>	GPA: --/4.0
University of Michigan , Ann Arbor, MI, United States	Sep 2018 - May 2021
<i>Bachelor of Science in Computer Science, History</i>	GPA: 3.7/4.0

Skills

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- C++, Unity, C#, SQL, MongoDB, JavaScript, html, css, Vue.js, Python, MATLAB
 - Fluent English, Chinese Mandarin, Cantonese, and Japanese (JLPT Level 1/N1: Passed in 2018).

Working Experience

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- Mars, Incorporated – Information Services**, Internship, *Guangzhou, China* Jun. 2020 – Aug. 2020
- Participated in two critical projects: IoT + 5G Intelligent Workplace, and Flexible Working.
 - Compiled an equipment handbook to guide future implementation of Intelligent Workplace in other sites.
 - Intelligent Workplace became a paradigm that guides the future deployment of IoT devices in other parts of Mars' business, including logistics, storage, and production line.
 - Designed interactive deliverables such as short videos and tips to advertise both projects among Mars associates, which received many rave reviews.

Project

Polaroid by P0tato Studio – A puzzle solving game (Unity, C#)

- Developed with a team of six and a student musician at the University of Michigan.
- Implemented critical components and functionalities, including the player movement, the control schema, and the in-game picture deletion feature.
- Designed and implemented most of the in-game UIs, such as the title menu, the camera switching animation, the pausing menu, button easing effects, sound effects, and the camera post-processing effect.
- Created and maintained an itch.io page for the game: <https://p0tatostudio.itch.io/polaroid>
- The game was publicly voted as the 6th best game of the class, out of more than 20 games.

Single-page Web Forum (HTML, CSS, JavaScript, Vue.js, Node.js, MongoDB)

- Designed and implemented a game forum with backend APIs to manipulate the data with a team of four.
- Provided comprehensive functionalities such as creating account, making new posts, and filtering contents. All data is processed by REST APIs and stored in the backend MongoDB Atlas database.
- Applied advanced user experience (UX) design principles; collected and analyzed feedbacks from users to improve usability and user interface, making the forum user-centered.

Pandas – Open-Source Data Analysis Tool in Python (Python)

- Contributed a bug-fix pull request to pandas via GitHub with a teammate.
- Fixed a bug related to the parsing of SQL query in the DataFrame object constructor. This bug will lead to the newly created DataFrame object have wrong column names that do not match the input query.
- Applied the principles of software engineering during the contribution process, such as risk and interest measurement, the communication between developers, and the readability and maintainability of codes.

Operating System Components (C++)

- Implemented core operating system components including thread library, memory pager, and file system.
- Implemented a disk tasks scheduler covering multi-thread programming to avoid data conflicts.