

EDUCATION

University of California, San Diego

09/2016-06/2020

- B.S. in Computer Science, Minor in Visual Arts: Computing and Arts (**GPA: 3.90/4**)
- Courses Taken: Data Structures, Algorithms, Software Engineering, HCI Design, Computer Graphics, Operating Systems

SKILLS

Language	C#, Java, HTML, CSS, Javascript, C, C++, Python, \LaTeX
Framework	Unity, SteamVR, Windows Desktop, Android, JavaFX, jQuery, Node.js, SQL, OpenGL, React.js, Spring
Software	Visual Studio, Android Studio, vim, Blender, git, Linux

WORK EXPERIENCE

Intern Full Stack Developer, LMT Technology, Shanghai, China

06/2018-08/2018

- Worked on migration of the company's product from Flash to HTML and Javascript, and from a custom back end to Spring framework. Reduced code length and boosted execution efficiency.
- Improved translation of the product's English version, making it more understandable by English speakers. Met with English-speaking customers and promoted the product.
- Introduced JSDoc, a documentation format for Javascript, to the team, setting up a uniform code format.

OTHER PROJECTS

Bodylogical MR, Unity Developer

10/2018-Present

- Working with Prof. Jurgen Schulze from UCSD Qualcomm Institute. This is an iOS AR app that would demonstrate the functions and use cases of Bodylogical, a human health simulator.
- Designed data panels with C#. Devised 3D ribbon charts to display health statistics, thus utilizing AR space to clearly visualize data both across different lifestyles and across time.
- Developed an animation system with Unity. Characters would perform different activities, giving an instinct reflection of his/her health status.
- Currently working on a "Prius" view that would visualize how specific health metrics affect one's internal health.

Mechsuit VR, Unity Developer

04/2017-Present

- Working in a 5-person team in VR club to create a game featuring Steam VR and Unity. Players would wear mechanic armors and fight in an arena.
- Implemented the inverse kinematic system for the armor using the positions of the VR headset and hand-held controllers. The suit's arm would match the player's arm movements, enabling efficient control of the armor.
- Programmed a propulsion system with player movements as input, enabling motion control for players, who would physically move to traverse through the arena instead of using the joystick.
- Designed health and weapon systems, and UI for health and ammo display. Wrote scripts with Strategy Pattern and interfaces so that they can be easily extended for various damage types and player resistances.
- Currently working on a motion recognition system with Tensorflow and LSTM. Players would be able to switch weapons by performing different actions.

Transracer, Full Stack Developer

04/2018-06/2018

- Worked in a 4-person team to create a web application with both front end (Bootstrap) and back end (Node.js). The app allows user to learn different languages through translating lyrics.
- Developed all the database logic with sqlite for songs and scores, so that users can upload their favorite songs to the app for practice, and view their past attempts.
- Improved score calculation based on the number of hints the user relies on and the correctness of the answer.

Flashback Music, Android Developer

01/2018-03/2018

- Worked in a 5-person, Agile team to create an Android application. This music app records the time and location songs are played so that users could reminisce on their moods.
- Separated UI interaction and back end logic with Model-View-Controller pattern resulting in cleaner code.
- Devised separate logic for local and cloud music under a set of interfaces with Strategy and Factory patterns.