hurenxu

# Renxu Hu

Seeking an Intern Opportunity for Software Engineer to Learn how to Operate Software Platforms Effectively

#### Education

June 2019 Bachelor of Science, Computer Engineering, UC San Diego, Provost's Honors, Major GPA – 3.8.

## Languages & Frameworks

Proficient:  $C\C++\C\#$ , JavaScript, HTML+CSS, PHP, Swift Languages

Intermediate: Java, Python, SystemVerilog, Android

Frameworks SQL, Ajax, JQuery, Node.js, React.js, OpenGL, Redux.js, Unity, TensorFlow, Firebase, LATEX

#### Work Experience

July 2016 - Tutor and Instructional Assistant, UCSD CSE Department, La Jolla, CA.

Present o Tutor for OOP, data structure, and OOD; instructional assistant for 3D computer graphics and real-time applications using modern OpenGL

o Analyzed and debugged students' code, and explained concepts in C, C++, Java, and OpenGL

April 2015 - Web Developer Intern, Beijing China IP LLP., Beijing, China.

July 2015 o Developed a dynamic and interactive website that enabled high traffic and better User Experience

o Implemented Progressive Web App(PWA) through web application manifest and service worker, which allows better performance to fulfill the RAIL Model(Response, Animation, Idle, Load) provided by Google

o Integrated a server that expedited search functionality by providing organized database and better search algorithm

Languages&Frameworks used: JavaScript, HTML, CSS, Node.js, PHP, mySQL, AJAX, JSON

## ----- Projects

August 2017 - **Dope**, Soundboard Web Application.

2017

- September o A soundboard web application that stores music to the personal customized playlist for people to store and play music online
  - o Implemented cache implementation to improve the performance, and used user authentication and authorization, input sanitization, and PHP hardening session to improve the security of the website
  - o Integrated a server that expedited sort functionality for music and playlists by providing an organized database and efficient search algorithms
  - Languages&Frameworks used: JavaScript, HTML, CSS, Node.js, PHP, MySQL, AJAX, Soundcloud API

January 2017 WOOF!, iOS Appliction.

- March 2017 o An iOS pet management and identification application that enables users to manage pets through daily journals and provides tips and recommendations for raising a pet
  - o Integrated Google Maps API, Google Sign-in API, Cloud Messaging API, and Notification System into backend
  - o Languages&Frameworks used: Swift, iOS, Google Maps API, Google Sign-In, Cloud Messaging, and Firebase

October 2017 Lowpoly Zen Island, OpenGL 3D Animation Application.

- December o A 3D animation app that creates a floating island with animated low-poly lake surrounded by low-poly mountain.
  - 2017 Integrated dynamic low-poly water and terrain effect with real-time reflection and refraction, snow particle effect with wind speed&direction control, and depth of field effect with adjustable focus length and aperture.
    - o Languages&Frameworks used: C++, OpenGL, irrKlang(sound engine), Blender

LA Hacks Hyperlink, Python Text-To-Video Reading Assistant.

- 2017 o A Python program that serves as a reading assistant which transfers text to video to provide interactive and adaptive reading method that helps people reading
  - o Integrated Azure cognitive services to provide audios and pictures to supply better memorization and understanding
  - o Languages&Frameworks used: Python, JavaScript, HTML, CSS, JQuery, Azure cognitive services, TensorFlow.