

NHI CHUNG

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Web portfolio: <http://nhibchung.github.io>

SUMMARY

Software engineer with experience in game development, AR/VR, and geospatial technology. Versed in implementing complex features such as networking, voice chat, integrating new software packages into existing projects, and working on game engine code. History of successfully prototyping experimental features and apps on multiple platforms including Windows, OpenXR, Oculus, Android, and iOS.

SKILLS

Technical

- Working knowledge of Unity C#, C++, AR/VR
- Experience with GIS, remote sensing, mapping APIs (Mapbox, Carto, Google Map)
- Familiar with Agile, Scrum, Git, PlasticSCM, Jira, Perforce

EDUCATION

Aug 2016 - May 2018

California State University, Fullerton

Fullerton, CA

Master of Science in Software Engineering (MSE) - GPA 3.83

Sep 2013 - Jun 2015

University of California, Santa Barbara

Santa Barbara, CA

Bachelor's Degree in Geography - Geographic Information Science (GIS) - GPA 3.66

- Dean's Honors: UCSB Winter 2015, Spring 2015

EXPERIENCE

Oct 2022 - Present

Raytheon

Remote (US)

Principal Software Engineer

- Develop military training application using Unity and Unreal game engines
- Analyze project codebase and contribute to a networking and architecture upgrade plan
- Implement new software features per customers' requirements
- Document team coding standards, project requirements, source control workflow, new developer guide, etc.

Mar 2021 - Aug 2022

HAVIK

Remote (US)

Software Engineer

- Startup in the military AR/VR training space
- Develop AR & VR simulations for military training using the Unity game engine
- Implement features including networking, voice chat, user login system, gameplay
- Use technology such as Unity C#, AR Foundation, open source libraries, ThreeJS, Distributed Interactive Simulation (DIS)
- Create prototypes for experimental features and applications for Windows and Android

Jul 2019 - May 2020

NextVR (startup acquired by Apple 05/2020)

Newport Beach, CA

Rapid Prototype Engineer

- Use Swift and AVFoundation to create an iOS application that synchronizes multiple iPhone cameras for stereoscopic/VR capture
- Integrate new functionalities into in-house game engine for VR using C++
- Utilize open source libraries to: access VR hardware (OpenVR), render 3D graphics, and play audio for in-house game engine development
- Use Unity game engine to develop prototypes for AR/VR platforms

Dec 2018 - Jun 2019

Motion Scientific

Greater Los Angeles Area

R&D Software Engineer: Augmented Reality

- Startup funded by the National Science Foundation (NSF) for phase I
- Research and develop an augmented reality (AR) application for physical rehabilitation
- Utilize Unity, Tensorflow and other technologies for Android and iOS development

Dec 2015 - Jan 2017

City of San Jose

San Jose, CA

Geographic Systems Specialist II

- Build web maps using Google Maps API, Google Apps Engine, Carto API, and JavaScript
- Help migrate enterprise GIS database, create and publish public facing GIS REST services for basemaps, utilities, and aerial imagery

PROJECTS

Matching Cards Game

- A simple card game created with Unity for WebGL that can be played in a browser.
- This project was for me to learn more about using design patterns in Unity.
- Check out the project on my [Github](#) page.
- Project demo link: <https://nhibchung.github.io/project/matchingCards/index.html>

Helicopter Simulation Oculus VR Game with 3D Map Based on Real-world Coordinates

- Created with Unity3D, C#, and WRLD SDK(for 3D maps)
- Gameplay includes piloting the helicopter to waypoints following a navigational arrows
- Project link: <https://nhibchung.github.io/project/helicopterVR/helicopterVR.html>

Poke-A-Mole Augmented Reality(AR) Game

- AR game created with Unity3D, C#, and Vuforia AR Groundplane
- Project link: <https://nhibchung.github.io/project/pokeAMoleAR/pokeAMoleAR.html>

Oculus Rift VR Exploration Game

- Immersive VR game level created with Unity3D in C#
- Uses the Oculus Avatar SDK hand features for Touch to interact with the environment
- Project link: <http://nhibchung.github.io/project/oculusExploration/oculusExploration.html>

VR Labyrinth for Android Google Cardboard – based on a Udacity project

- VR game created with Unity3D in C#
- Project link: <http://nhibchung.github.io/project/vrLabyrinth/vrLabyrinth.html>

Interactive Solar System created with Unity3D Game Engine

- 3D browser-based WebGL Solar System application with clickable objects and minimap
- The sun and all planetary objects created using NASA images
- Project demo link: <https://nhibchung.github.io/project/solarSystem/>

GIS Presentation - 2016 Election Prediction using Geospatial Data – Group Project

- Used Java and Twitter API to gather geotagged tweets containing 6 popular presidential candidates to make predictions for the 2016 elections
- Compared data with polls, performed sentimental analysis using the Stanford NLP API
- Poster Link: <http://nhibchung.github.io/project/gisPoster.pdf>