NHI CHUNG

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SUMMARY

Software engineer with 4+ years AR/VR and startup experience. Versed in implementing complex features such as networking and voice chat, integrating new software packages into existing projects, and working on VR 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

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

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
- Integrate foot pedal hardware with Unity VR app
- 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 (OpenGL), 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

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

- Created with Unity3D, C#, and WRLD SDK(3D maps based on real-world coordinates)
- 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: http://nhibchung.github.io/project/solarSystem

GIS Group Poster Presentation – Course 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

COURSES

University of California, Santa Barbara

Python - Intro to Computer Science (CMPSC 8)
C - Problem Solving I (CMPSC 16)
C++ - Problem Solving II (CMPSC 24)
Java - Conceptual Modeling and Programming for the Geo-Sciences (GEOG 178)
Analytical & Computer Cartography - Web Mapping with JavaScript, HTML5, CSS (GEOG 128)
Calculus with Applications 2 (MATH 3B)
Linear Algebra with Applications (MATH 4A)

California State University, Fullerton

Systems and Software Standards and Requirements (CPSC 541)
Software Verification and Validation (CPSC 542)
Software Maintenance (CPSC 543)
Advanced Software Process (CPSC 544)
Software Design & Architecture (CPSC 545)

Independent Coursework

Saylor Academy - Elementary Data Structures (CS 201)
Udacity courses - Introduction to Virtual Reality, VR Scenes & Objects, VR Software Development
(Note: please visit LinkedIn for a complete list of courses)