# **NHI CHUNG**

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LinkedIn: https://www.linkedin.com/in/nhichung Web portfolio: http://nhibchung.github.io

# **SUMMARY**

Software engineer with experience working at startups, video game, AR/VR, and geospatial technologies. Fast-learner, adaptable, analytical, and detail oriented self-starter with a passion for learning; able to prioritize effectively to accomplish multiple tasks with creativity and stay calm under pressure.

#### **SKILLS**

Technical

- Working knowledge of C++, C# (Unity3D), Java, video game, AR/VR, Unity, Vuforia, OpenGL, Tensorflow, WebRTC, HoloLens, NReal, Oculus, WindowsMR
- Experience with GIS, remote sensing, mapping APIs (Mapbox, Carto, Google Map)
- Familiar with Agile, Scrum, Git, Google Analytics, Photoshop

#### **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**

Jul 2019 - May 2020

**NextVR** (start-up acquired by Apple 05/2020)

Newport Beach, CA

Rapid Prototype Engineer

- Integrate new functionalities into in-house game engine for VR using C++
- Utilize open source API/SDK 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

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

Jun 2018 - Nov 2018 **B**e

Boeing

Huntington Beach, CA

Software Engineer II

- Assist with the development, testing, documentation and maintenance of software systems
- Work on Java database migration and Unity game engine for HoloLens 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, 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: <a href="https://nhibchung.github.io/project/matchingCards/index.html">https://nhibchung.github.io/project/matchingCards/index.html</a>

### 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: <a href="https://nhibchung.github.io/project/helicopterVR/helicopterVR.html">https://nhibchung.github.io/project/helicopterVR/helicopterVR.html</a>

### Poke-A-Mole Augmented Reality(AR) Game

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

# 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: <a href="http://nhibchung.github.io/project/oculusExploration/oculusExploration.html">http://nhibchung.github.io/project/oculusExploration/oculusExploration.html</a>

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

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

# 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: <a href="http://nhibchung.github.io/project/solarSystem">http://nhibchung.github.io/project/solarSystem</a>

#### 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: <a href="http://nhibchung.github.io/project/gisPoster.pdf">http://nhibchung.github.io/project/gisPoster.pdf</a>

#### **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)