# **NHI CHUNG**

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Linkedln: <a href="https://www.linkedin.com/in/nhichung">https://www.linkedin.com/in/nhichung</a> Web portfolio: <a href="http://nhibchung.github.io">https://nhibchung.github.io</a>

#### **SUMMARY**

Software engineer interested in all aspects of software development especially in regards to AR/VR/MR, video game, computer graphics, and geospatial technologies. 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**

Personal

• Fast learner | Eye for detail | Problem solving skills | Experienced in fast paced high pressure environments | Bilingual; fluent in both English and Vietnamese

Technical

- C#, Java, C++
- Experience with AR/VR development, Unity, Oculus, Vuforia, HoloLens, NReal, OpenCV, Tensorflow, WebRTC
- Knowledge of ArcGIS, Quantum GIS,remote sensing,, and mapping APIs (Mapbox, Carto, Google Map)
- Familiar with IRA, 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 Univers

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 - present NextVR

Greater Los Angeles Area

Rapid Prototype Engineer

- Use Unity engine to develop prototypes for AR/VR platforms
  - Integrate new functionalities into proprietary engine

Dec 2018 - Jun2019

#### **Motion Scientific**

Greater Los Angeles Area

**R&D** Software Engineer: Augmented Reality

- 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

Boeing

Greater Los Angeles Area

Software Engineer II

- Assist with the development, documentation and maintenance of software systems
- Integrate software components into a fully functional software application
- 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

- Built web maps using Google Maps API, Google Apps Engine, Carto API, JavaScript, HTML5, CSS. See map gallery at: <a href="http://csj-mapsgallery.appspot.com">http://csj-mapsgallery.appspot.com</a>
- Helped migrate enterprise GIS, created and published public facing GIS REST services for basemaps, utilities, and aerial imagery

# **PROJECTS**

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
- This game stems from my graduate studies project which explored the use of temporarily visible 3D navigational aids
- 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 link: <a href="http://nhibchung.github.io/project/solarSystem">http://nhibchung.github.io/project/solarSystem</a>

# Interactive Web Map of Tweets about the 2016 Presidential Candidates

- Map of tweets about candidates for the 2016 Elections with data collected over 4 weeks
- Web map created with JavaScript, HTML5, CSS and Mapbox API
- Project link: <a href="http://nhibchung.github.io/project/electionWebmap.html">http://nhibchung.github.io/project/electionWebmap.html</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)