

## 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  | <ul style="list-style-type: none"><li>• Fast learner   Eye for detail   Problem solving skills   Experienced in fast paced high pressure environments   Bilingual; fluent in both English and Vietnamese</li></ul>  |
| Technical | <ul style="list-style-type: none"><li>• C#, C++, Java, Python C, SQL, JavaScript, HTML5, CSS</li><li>• Experience with AR/VR development, Unity, Vuforia, HoloLens, OpenCV, Tensorflow</li><li>• Knowledge of mapping APIs (Mapbox, Carto, Google Maps, ArcGIS JS)</li><li>• Proficient with GIS software such as ArcGIS, Quantum GIS and remote sensing tool ENVI</li><li>• Familiar with JIRA, Agile, Scrum, Git, Google Analytics, Photoshop</li></ul> |

## EDUCATION

- |                     |  |                   |
|---------------------|--|-------------------|
| Aug 2016 - May 2018 | <b>California State University, Fullerton</b>  | Fullerton, CA     |
|                     | <i>Master of Science in Software Engineering (MSE) - GPA 3.83</i>                              |                   |
| Sep 2013 - Jun 2015 | <b>University of California, Santa Barbara</b>   | Santa Barbara, CA |
|                     | <i>Bachelor's Degree in Geography - Geographic Information Science (GIS) - GPA 3.66</i>        |                   |
|                     | <ul style="list-style-type: none"><li>• Dean's Honors: UCSB Winter 2015, Spring 2015</li></ul> |                   |

## EXPERIENCE

- |                     |  |                          |
|---------------------|--|--------------------------|
| Jul 2019 - present  | <b>NextVR</b>  | Greater Los Angeles Area |
|                     | <i>Rapid Prototype Engineer</i>  |                          |
|                     | <ul style="list-style-type: none"><li>• Utilize Unity engine to quickly implement and iterate UX design prototypes and porting across platforms for AR/VR</li></ul>  |                          |
| Dec 2018 - Jun 2019 | <b>Motion Scientific</b>   | Greater Los Angeles Area |
|                     | <i>R&amp;D Software Engineer: Augmented Reality</i>  |                          |
|                     | <ul style="list-style-type: none"><li>• Research and develop an augmented reality(AR) application for physical rehabilitation</li><li>• Utilize Unity game engine and other technologies for mobile app development</li></ul>  |                          |
| Jun 2018 - Nov 2018 | <b>Boeing</b>  | Greater Los Angeles Area |
|                     | <i>Software Engineer II</i>  |                          |
|                     | <ul style="list-style-type: none"><li>• Assist with the development, documentation and maintenance of software systems</li><li>• Integrate software components into a fully functional software application</li><li>• Work on Java database migration and Unity game engine for HoloLens development</li></ul>   |                          |
| Dec 2015 - Jan 2017 | <b>City of San Jose</b>  | San Jose, CA             |
|                     | <i>Geographic Systems Specialist II</i>  |                          |
|                     | <ul style="list-style-type: none"><li>• Built web maps using Google Maps API, Google Apps Engine, Carto API, JavaScript, HTML5, CSS and AngularJS. See map gallery at: <a href="http://csj-mapsgallery.appspot.com">http://csj-mapsgallery.appspot.com</a></li><li>• Set up the city's pilot Open GIS Data Portal site. View site image <a href="#">link</a></li><li>• Helped migrate enterprise GIS, created and published public facing GIS REST services for basemaps, utilities, and aerial imagery: <a href="http://gis.sanjoseca.gov/arcgis/rest/services/Publish">http://gis.sanjoseca.gov/arcgis/rest/services/Publish</a></li></ul> |                          |

## 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: <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 link: <http://nhibchung.github.io/project/solarSystem>

### *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: <http://nhibchung.github.io/project/electionWebmap.html>

### *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)