

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">• Fast learner, eye for detail, problem solving skills, experienced in fast paced high pressure environments, bilingual in both English and Vietnamese |
| Technical | <ul style="list-style-type: none">• C#, Java, C++• Working knowledge of AR/VR development, game engine development, Unity, Vuforia, OpenGL, Tensorflow, WebRTC, HoloLens, NReal, Oculus, WindowMR• Experience with GIS, remote sensing, mapping APIs (Mapbox, Carto, Google Map)• Familiar with JIRA, Agile, Scrum, Git, Google Analytics, Photoshop |

EDUCATION

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

EXPERIENCE

- | | | |
|---------------------|--|--------------------------|
| Jul 2019 - present | NextVR | Greater Los Angeles Area |
| | <i>Rapid Prototype Engineer</i> | |
| | <ul style="list-style-type: none">• Integrate new functionalities into in-house game engine for VR headsets using C++• Utilize open source API/SDK to access VR hardware (OpenVR), render 3D graphics (OpenGL), and play audio (Miniaudio) for in-house game engine development• Use Unity game engine to develop prototypes for AR/VR platforms | |
| Dec 2018 - Jun2019 | Motion Scientific | Greater Los Angeles Area |
| | <i>R&D Software Engineer: Augmented Reality</i> | |
| | <ul style="list-style-type: none">• 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 |
| | <i>Software Engineer II</i> | |
| | <ul style="list-style-type: none">• 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 |
| | <i>Geographic Systems Specialist II</i> | |
| | <ul style="list-style-type: none">• 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

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)