# Ray Chen

3D Web Visualization, AR/VR, Computer Graphics, Full-Stack Development

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## **WORK EXPERIENCE**

# Netflix, Senior Software Engineer

Ian 2020 - Present

# Typescript/Javascript/React/Node/Electron/Microservices

Lead Netflix cinematic experience for millions of devices using proprietary rendering pipeline

Lead development of internal tools to enable real-time advanced computer graphics enhancement and creative experience

Establish procedural assets generation pipelines to support on-demand personalized experience with global CDN

Create a distributed system for interactive video rendering and encoding workflow to facilitate the turnaround time from hours to second

# YouSpace, Product Engineering Lead

Oct 2016 - Jan 2020

## Javascript/WebGL/WebSocket/Unreal Engine 4/3D PointCloud

Lead software development on human body recognition leveraging multi depth sensors with proprietary computer vision and machine learning solutions

Build a 3D asset digitalization pipeline to convert physical products to virtual items with physics based simulation

Create and deploy interactive experiences to partners in retail, fashion, and education

Release 3D human tracking SDK in Javascript, C, Unreal Engine 4, and Unity 3D

# DAQRI, Software Engineer

Oct 2015 - Oct 2016

#### Javascript/C++/WebGL/QT/3D User Interface/Augmented Reality

Create a WebGL 3D visualization system to allow real-time sensor tracking and post-play event processing

Developed heads-up stereoscopic display user interface for marker-based task visualization

# eBay, Design Engineer

July 2014 - Oct 2015

# Javascript/Python/RFID/Physical Computing/Retail Innovation

Build a full stack solution for omni-channel smart fitting rooms in Rebecca Minkoff retail store, including RFID tag reading, frontend animation and backend management system

Develop and prototype products on large display and NFC payment systems

## **EDUCATION**

MS in Digital Media 4.0/4.0 Georgia Institute of Technology

**BBA in Information Management 3.78/4.0**National Taiwan University

#### **AWARDS**

#### **Best Paper Honorable Mention**

Associated Schools of Construction 2016

## **Third Place**

May 2013 Dev Derby Challenge MOZILLA

#### **First Place**

Hackathon 2013, EBAY

#### **First Place**

Samsung Anycall Dreamers, SAMSUNG

#### **PATENTS**

Interactive Systems for Depth-Based Input US10303417B2

Systems and Methods for Gesture-Based Interaction

US10303259B2

# **PUBLICATIONS**

# BIM2MAR: An Efficient BIM Translation to Mobile Augmented Reality Applications

Jul 7, 2014 publication descriptionAmerican Society of Civil Engineers (ASCE)

SciSketch: a tabletop collaborative sketching system

Feb 16, 2014 publication descriptionAssociation for Computing Machinery (ACM)

An Augmented Panoramic Environment To Access Building Information on a Construction Site

Associated Schools of Construction (ASC)