

Gang Yao

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EXPERIENCES

Amazon Web Services, Identity & Access Management Group

Software Development Engineer, Amazon.com Inc. Seattle, WA

July 2020 – Present

- Work on user identity and permission management for all AWS services.

Fengyun Supply Chain App Development

Front-end Developer Intern, FengDing Tech, Ltd. Hangzhou, China

May 2019 – Jul 2019

- Collaborated on a cross platform commercial app dev project using Vue.js. Primarily worked on the front-end programming in JavaScript to meet design requirements and back-end interface standards.

EDUCATION BACKGROUND

University of California, Berkeley

Aug 2019 – May 2020

- Master of Engineering in Electrical Engineering & Computer Science (GPA: 3.86/4.00)
- Concentration: Visual Computing & Computer Graphics

Zhejiang University, China

Sep 2015 – Jul 2019

- Bachelor of Engineering in Electrical Engineering (GPA: 3.92/4.00)
- Concentration: Imaging & Embedded Systems

SKILLS

Primary Programming Language: C++, Python, JavaScript

Secondary Programming Languages: Java, C#, C, CUDA, MATLAB

Tech Stack Proficiencies: Unity 3D, Unreal Engine 4, OpenGL, OpenCV, CUDA-C, Blender, NumPy, Jupyter, Matlab, Vue.js, Three.js, html5/css3

PROJECTS

ISAACS: Enhance Semi-autonomous Robot Navigation with Augmented Reality [Ⓜ]

Researcher, FHL Center of Enhanced Reality, University of California, Berkeley, CA

Aug 2019 – May 2020

- Research on pedestrian path prediction and visualization to better serve assisted semi-autonomous navigation. Built a simulation and a prototype demo to prove AR assisted human agent can promote navigation safety.

CUDA-based Spatial Hierarchical Data Structure for Computer Graphics Acceleration [Ⓜ]

Final Project, CS267 Parallel Computing, University of California, Berkeley, CA

March 2020 – May 2020

- Implemented parallelized BVH and KD tree construction for real-time ray-tracing. Paper reference from Nvidia.

Volumetric Cloud Rendering [Ⓜ]

Final Project, CS284 Computer Graphics, University of California, Berkeley, CA

April 2020 – May 2020

- Simulate realistic cloud using PBR volumetric rendering with Unity Compute Shader.

Blood Vessel Imaging System Development (Senior Thesis) [Ⓜ]

Student Intern, Neural System Group @ Harvard Medical School, Boston, MA

Nov 2018 – Apr 2019

- Research on vascular structure imaging with custom built hardware and software. Research on feature extraction with Matlab and OpenCV-C++.

Ultrasonic Laser Shadowgraph Video Analysis [Ⓜ]

Short-term Researcher, EECS @ University of Michigan, Ann Arbor, MI

Jul 2018 – Oct 2018

- Utilized the **KNN background segmentation** and image-processing techniques for prototyping algorithm in **OpenCV-Python** to identify each cluster of air bubbles.

3D Rubik Cube Game [Ⓜ]

Jul 2019

- Implemented an interactive Rubik Cube simulation app with Three.js. Click on the link to view Heroku demo.

Automating the WeChat Jump Game [Ⓜ]

Mar 2018 – Apr 2018

- Combined a computer vision and robotics system to play the WeChat Jump game all by itself.