

Education:

Carnegie Mellon University, USA

Master of Entertainment Technology

August 2010 - May 2012

Zhejiang University of Technology, China

Bachelor of Software Engineering (Digital Media)

July 2006 - June 2010

Skills:

Programming: Javascript, WebGL, OpenGL ES, WebGL, C/C++, C#, Java, , CUDA, OpenCL, OpenCV, Python, Matlab

Languages: English(Fluent), Mandarin Chinese(Native)

Professional Experience:

Computer Graphics & BIM

December 2016 - Present

- Refactoring EGS' rendering engine, of Kujiale, performance optimization, special effects rendering, daily maintenance, etc.
- Develop and maintain ModeloAPI, a WebGL-based online rendering engine. Successfully commercialized and far superior to similar products in various rendering metrics
- Being able to load an over 2G size model on a normal computer (MacBook Pro)
- Develop many kinds of rendering effects (Shadow, Light, SSAO, Sketch etc.)
- Develop practical tools such as Measure, Section, Walkthrough and so on.
- Mobile development includes rendering VR, Panorama
- Parse and load different kinds of model format (Revit, Obj, FBX, SketchUp, 3dsMax, STL, dwg etc.), especially Revit Plugin development to extract the BIM info. Combine models online with custom setting.

Computer Vision

September 2016– December 2016

➤ DSST Object Tracking

Reference and Implement the algorithm of paper "Accurate Scale Estimation for Robust Visual Tracking", apply the algorithm on mobile device with C code, FPS 40 on iPhone 5S

➤ JDA Face Detection and Alignment

Reference and Implement the algorithm of paper "Joint Cascade Face Detection and Alignment", Get a result of 85% TP rate on FDDB, FPS 60 and the trained model size is limited under 4MB

➤ Multi-View 3D Object Reconstruction

Reconstruct an object into a 3D model with several pictures from different views. Extracting the image feature points with SIFT, then calculate the camera matrix and the 3D coordinates. Reform the point cloud into mesh with the images as texture mapping to get the final 3D model.

Job & Internship Experience:

Kujiale, Inc

April 2019 - Present

- Technical experts, team leader of EGS Group
- Be responsible for the R&D of EGS rendering engine, mainly focusing on improving FPS, reducing memory cost, etc

Modelo, Inc

December 2016 – March 2019

- Rendering Engineer, Use WebGL1.0 and 2.0 to render 3D models on the page with self-implemented rendering engine
- Load models(bigger than 2G) on both PC and mobile side, fetch BIM info from Revit and convert CAD files.

Xiaoying, Inc

June 2016 - Present

- Algorithm Engineer
- Work on the image effects and facial expressions detection and object tracking algorithm

AirTake, Inc.

July 2015 - May 2016

- Algorithm Engineer
- Work on the face detection and recognition algorithms with deep learning.

Arcsoft, Inc.

June 2012 – July 2015

- Software Engineer
- Software develop and algorithm research, focusing on CG & CV area and applying them into different mobile devices

CMU Computer Graphics Teaching Assistant

January 2012 – May 2012

Visit my personal website (see above) for more personal information and projects experiences.