Yaqin Huang

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WORK EXPERIENCE

SolidWorks eDrawings R&D Dev Engineer | Unity & C++ & HoloLens   **MAR 2018-MAR 2020**

- Work closely with teammates under Agile Scrum Methodology, and use Unity, MRTKV2 and GLTF Importer to develop HoloLens 2 Augmented Reality CAD Model viewer app that allows user to load multiple GLTF models, precisely mate models to physical environment and move/rotate/scale models
- Use eDrawings C++ OpenGL based Render System to develop HoloLens 1 CAD Model viewer streaming solution that is streamed from eDrawings Desktop so user could load massive industry model
- Use eDrawings C++ OpenGL based Render System to implement Section View in eDrawings Desktop: user could drag Section Plane along local axes using mouse, hide/show Section Plane and change direction of Section Plane

SolidWorks AR Software Developer Intern | Unity & HoloLens 1   **MAY 2017-JAN 2018**

- Demoed in SolidWorks World 2018 Conference, Use Unity, MRTKV1, Unity Dropbox Asset, and Microsoft Spectator View toolkit to develop the Proof-Of-Concept HoloLens 1 AR CAD Model viewer app
- User could load multiple GLTF models from local storage or Dropbox cloud storage, mate models to physical environment, move/rotate/scale models and provide third-person view with external DSLR camera

PATENT

"Systems and Methods for Mating Virtual Objects to Real World Environments". Patent Pending   **FEB 2019**

- Work closely with UX designer to do brain-storming and fast prototyping for new interactions and tools to overcome the difficulty of selecting and placing objects precisely in AR/VR/MR environment
- Use Unity and MRTKV1 to develop the selecting and mating interaction tools so user could archive the same workflow with minimum cost

EDUCATION

BOSTON UNIVERSITY   **SEP 2016-FEB 2018**

- Master of Science in Electrical and Computer Engineering

PURDUE UNIVERSITY   **AUG 2012-MAY 2016**

- Bachelor of Science in Electrical Engineering (Dean's list student and TA experience)

AWARDS

Your Ads | Unity & Vuforia & HoloLens 1   **MAR 2017**

- **Discover Virtual 2 Reality Challenge Second Prize, Invited to PYMNTS.com Innovation Project Conference**
- Use Unity, MRTKV1 and Vuforia SDK to build a prototype app that introduces the concept of future advertisements: everyone could enjoy customized 3D interactive ads based on the result of Machine Learning algorithm from personal purchase history

InkFinity | Unity & HTC Vive   **NOV 2016**

- **MIT Media Lab Hacking Arts Hackathon Hackers' Choice Award**
- Use Unity and SteamVR to build a prototype app that offers a unique VR poetic journey inside Chinse traditional ink paintings: by integrated with VR, painting arts rise to a whole new dimension

RESEARCH EXPERIENCE

MIT Media Lab Fluid Interface Group Virtual Reality Research | Unity & MUSE   **MAY-SEP 2016**

- Work closely with research instructor to develop Mobile PsychicVR Android app with MUSE brain-sensing headband to enhance focusing: users get the object control superpower using brain sensing in single-player mode
- Work closely with research instructor to develop multiplayer mode in MPVR app with Photon Unity Networking: user could visualize real-time brain activities in spirit mode and communicate in voice chat