

# Jacob Young

## Technical Artist - Web XR

### Education

University of Oklahoma: 13 - 18.

BFA in Art, Technology and Culture. GPA: 3.6.

Minor in Computer Science.

### Work Experience

#### Rooster Teeth Productions | QA Technical Artist

[ Jul 18 - Present ]

- Automated workflow processes for artists using python and managed / stabilized render farm of 200+ machines.
- Point of contact for the tech team. Collaborated with multiple departments and technical teams of software applications to resolve studio wide technical challenges.
- Familiar writing .bat scripts and python to maintain pipeline stability.
- Debugging existing and experimental technologies (3D applications, renderers, etc) to stabilize the pipeline and create a workflow.
- Automated End to End (E2E) testing for inhouse software which spans between several graphics applications including 3DSMax, Maya, Houdini, Photoshop, AFX, Premiere, Nuke and Toonboom.

#### HartSight | Co-founder / Unity Developer / React Developer

[ Jan 19 - Present ]

- Start-up initiative that applies Augmented Reality to traditional print communication to engage, educate and connect in ways never before possible.
- Created and optimized 3D environments in Maya and Unity 3D for mobile web based augmented reality applications.
- Developed company website using React, WebAR and WebGL to allow mobile AR interaction.

#### Magrathea Technologies | QA Engineer

[ June 17 - June 18 ]

- Proposed and developed code-generation tools for Angular 2 unit testing, reducing boilerplate by 70%.
- Developed Angular 2 unit tests.
- Angular 2 front end development for SaaS application.

#### University of Oklahoma | Visualization Lab VR Developer

[ Feb 17 - June 18 ]

- Developed Virtual Reality applications to demonstrate practical applications of the technology to entrepreneurs.
- Developed training for Virtual Reality technologies.
- Demonstrated practical applications of existing VR tools for rapid design prototyping.
- Coordinated and executed outreach events to showcase related emerging technologies.
- Hosted workshops to teach beginners AR, VR, 3D modeling, 3D printing and programming.

### Projects

#### Cookieshop.com | Front End Developer

[ Dec 18 - Feb 19 ]

- Collaborated with client and designer to develop a website for a Dallas-based bakery.
- Created an expandable, customizable website using Shopify's Liquid template language, Javascript, and SCSS.
- Created custom SVG animations using javascript and scss.

## WebVR Art Gallery | Web UX Engineer

[ Jan 18 - Apr 18 ]

- Real-time, high performance virtual reality web art gallery using A-Frame which features multiple digital works including photography, VR sculpture (Tilt Brush and Oculus Medium), 3D models, photogrammetry and processing sketches, optimized for mobile web.
- 3D environment and models created in Maya. Light, AO and normal maps baked with Mental Ray and Arnold.

## ARt Gallery | Unity Developer

[ Dec 17 - May 18 ]

- Augmented Reality art gallery allowing users to view and manipulate images.
- Application developed for iOS and Android using Unity 3D (C#) and Vuforia for the Fred Jones Jr. Museum of Art.
- Led the interaction design, UX and development of the project.

## Personal Avatar Generator | Unity Developer

[ Dec 17 - May 18 ]

- Simplified the process of creating a personalized 3D game avatar.
- Automated pipeline creation, optimization and rigging of photogrammetric scans.
- Technologies used in this project include: Unity 3D, Autodesk Maya, Structure Sensor, Kinect 2.0, Node.js.

## Skills

### Technologies:

- **Applications:** 3D Studio Max, Autodesk Maya, Cinema 4D, Houdini, Nuke, ToonBoom, Unity 3D.
- **Adobe Creative Suite:** After Effects, Illustrator, InDesign, Photoshop, Premiere.
- **Renderers:** Arnold, Mantra, Mental-Ray, Redshift.
- **AR / VR:** Vuforia, WebAR, WebXR, Amazon Sumerian.
- **Other:** Alembic, Confluence, Jira, Royal Render, Source Tree.

### Development:

- **Web:** ReactJS, Redux, Angular 2, Nodejs, NPM, TypeScript, JavaScript, HTML5, SCSS / CSS3, Firebase, IndexedDB, Parcel bundler, Webpack.
- **WebGL:** Three.js, A-Frame, GLSL.
- **General:** C#, Unity Cg, HLSL, Java, Python, PyMEL, Git.

### Art / Design:

- 3D Modeling, UV Mapping / Unwrapping, Texturing / Baking maps (light, AO, normals, etc), Rigging, Animation, Character Design / Animation, Particle Systems, Lighting.
- Photogrammetry, UX, Interaction Design, Game Design.
- 360 Video, Filming and Video Editing, 3D Printing, Drawing, Storyboarding.

## Achievements / Acknowledgments

- Awarded the Grow with Google Scholarship: Mobile Web Specialist.
- Co-founder of OU Virtual Reality Association, Spring 2017.
- President's Honor Roll for 2-years.
- Dean's Honor Roll for 4-years.
- Studied abroad in Italy Summer 2015.
- Participant at Hacklahoma 2018 Hackathon as web mobile vr developer.
- Participant at Walmart Technologies 2018 XR Hackathon as a unity developer.
- Volunteer at Google Fiber space.
- Volunteer at Developer Week 2018.
- Volunteer at United Way May 2019.