Yaorui Zhang

Email: yaoruizh1997@gmail.com portfolio.yaorui.info Mobile: +1 603 322 3599

EDUCATION

• Dartmouth College, Computer Science / Digital Art

Master of Science, Department of Computer Science; Graduated in June 2021

Sep. 2019 – June 2021

Hanover, New Hampshire

• Zhejiang University, Digital Media Technology

Bachelor of Engineering, College of Computer Science and Technology;

• Grade: Overall GPA: 3.85 / 4.0. Major GPA: 3.95 / 4.0

Aug. 2015 – June 2019 Hangzhou, China

Professional Experience

• Front-end Engineer

Creator Front-end, TikTok

July. 2021 - Present

San Jose, CA

- o Migrated TikTok Video Analytics page (a page runs inside TikTok with 3M DAU) from React to Lynx (light-weighted React Native) as well as improved the user experience by utilize some native interactions, which reduced page LCP by 58% and increased the retention rate.
- o Drove the front-end development of 2 major upgrades for TikTok creation inspiration page, as well as the tech stack migration, leading to a 61% LCP reduction and a higher DAU.
- o Took response of the MVP global launch and maintenance of TikTok Creator Center Web, where we provided a web platform for creators to manage their video and interaction data; Led the development of the comment management module. The DAU of the page has reached 450K within 3 months.
- As the front-end tech owner, led an FE team of 3 to develop the TikTok Stickers web page from scratch using TypeScript, React, and WebPack5 to allow users to create customized sticker sets.

• Front-end Engineer internship

IES (Interactive Entertainment Social) Front-end, ByteDance

Sep. 2020 - Dec. 2020

Shanghai, China

- o Participated in the development and maintenance of Douyin Open Platform and Creator Platform using React
- Developed templates to display usage examples (config with JSON); Used local storage to improve performance
- Used Ant Design to create forms of an information editing and a feedback page; Used ECharts to create graphs for a quota usage page

Personal Projects

• A Chrome extension to manage tabs(2ManyTabz), Teamwork

May 2020 - June 2020

- o Implemented the UI of the popup page using React; Data is stored in the background and managed with Redux
- Read and managed tabs through the Tabs API provided by Chrome, calling from the background page
- Developed API of the server using Express & MongoDB; respond to frontend requests and modify users' favorities

• A web-based painting tool, Individual Work

May 2020 - June 2020

- The tool allows for loading pictures, drawing curves/ polygons/ discrete points, using native JS
- o Implemented a manager class to create, delete, hide/show and switch layers; Layers are drawn by canvas functions
- Integrated this application with TetGen to generate triangular meshes from contours; Implemented mesh coloring

• Photo realistic rendering, Individual Work

Oct 2019 - Nov. 2019

- o Implemented path tracing, importance sampling, photon mapping, etc., enabling rendering of common-used materials including Lambertian, Phong, Blinn-Phong, Dielectric, Metal as well as blending materials using C++.
- Modeled and set up a final scene to test the program; Won the third prize in the Rendering Competition in class.

• VR game of underwater exploration (Deep DiVR), Teamwork

Oct 2019 - Nov. 2019

- Modeled the environment and animated props in Maya; optimized meshes to allow for efficient rendering.
- o Overcame the difficulty of limited material settings in LWRP; used multiple approaches to texture objects
- Created the translation animation both within a Unity scene and between scenes, using C#

SKILLS

- Programming & Developing: React, C++, HTML, CSS, JavaScript, TypeScript, Webpack5, Node.js
- Other Software: Unity 3D, Maya