

CHENHAO LI

(+86)19921565116
Permanent: Room 401, 152 Qiuqing Rd., Shanghai, 201615

lee_vius@sjtu.edu.cn
Personal Site: <https://lee-vius.github.io>

EDUCATION

Shanghai Jiao Tong University

Projected to learn: Master of Science in Software Engineering
GPA: 3.65/4.0

Shanghai, China

Sept. 2020 - Present

University of Michigan

Bachelor of Science in Computer Science Engineering
GPA: 3.95/4.0

Ann Arbor, USA

Sept. 2018 - May 2020

Shanghai Jiao Tong University

Bachelor of Science in Electronic and Computer Engineering
GPA: 3.6/4.0

Shanghai, China

Sept. 2016 - Aug. 2018

EXPERIENCE

Research: Stereo-vision Based Brain Shift Evaluation

Technical Programmer

- Cooperated with Huashan Hospital to research on brain shift evaluation algorithm
- Proposed stereo-vision based and feature matching algorithms for brain shift problem
- Experimented with deep learning methods based on RaftStereo and Mask R-CNN

Shanghai, China

Nov. 2021 - Present

Web App: COP15 Virtual Exhibition for Shanghai

Technical Programmer

- Rapidly implemented 3D virtual exhibition for web based on Unity3D
- Implemented and designed logics for exhibition at various stages, and deployed as WebGL application
- Implemented smooth curve motion, UI function, Asynchronous data transfer and multi-platform application

Shanghai, China

Aug. 2021 - Oct. 2021

Research: Expression Motion Stylizing for 2D Human Face

Technical Programmer

- Implemented 2D facial expression transfer with styleGAN and First Order Motion models
- Collected Disney characters facial expression data and Apply styleGAN model to generate stylized facial images
- Trained and apply First Order Motion Model to transfer stylized facial expression from videos to images

Shanghai, China

Mar. 2021 - Jun. 2021

Research: 3D Face Model Deformer based on Deep Learning

Technical Programmer

- Implemented a face model deformer based on deep differential subspace reconstruction
- Designed deep neural network to train model deformer given input rig parameters and output target expression
- Implemented reconstruction algorithm to re-generate facial model based on output of neural network

Shanghai, China

Sept. 2020 - Jan. 2021

Game Development: Xtraction Point

Team Leader & Main Programmer

- Designed a game of adventure genre and lead a group of four
- Implemented and designed enemy, scene assets mechanics, level progress and pixel art animations
- Attended Game Design showcase of UM Fall 2019 and achieved 7th/32 for audience voting

Ann Arbor, USA

Oct. 2019 - Jan. 2020

Research: Variant Calling for Genomics Alignment

Research Assistant & Software Programmer

- Improved software acceleration for DNA alignment and tested CPU time on core algorithm
- Design corresponding algorithm for fixed point calculation to output the same correct results
- Improve time performance of new algorithm on FPGA board to three times to original version

Ann Arbor, USA

Jan. 2019 - Aug. 2019

Coursework & Projects

Sept. 2018 - Present

- Android App: Design and development of Map application showing salinity data for water source
- Software Engineering: Design and development of medical image processing software
- UI Design: Design and Implementation of Vscode extension — *Numpy Helper*
- Web Systems: Design and Implementation of client/server dynamic pages
- Computer Vision: Cancer segmentation for lung images, Implementation and test of Faster R-CNN model
- Game Design: Implementation of *Zelda I* — *Dungeon* and Design of game — *Gemini*
- Machine Learning: Application of SVM and CNN, Image Style transfer with StyleGAN model

ACHIEVEMENTS

- Dean List of University of Michigan, CSE department Dec. 2018 - Feb. 2020
- First Prize in Game Jam by Wolverine Soft, University of Michigan Nov. 2019
- Dean List of Joint Institute of SJTU-UM, Shanghai Jiao Tong University Dec. 2016 - Feb. 2018
- Scholarship for excellent undergraduates, Shanghai Jiao Tong University Dec. 2017 - Feb. 2018
- Wu Jong-Sun Jie Scholarship for JI excellent student Sept. 2016 - May 2017