CHENHAO LI

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EDUCATION

Shanghai Jiao Tong University **Shanghai, China**
Projected to learn: Master of Science in Software Engineering Sept. 2020 - Present
GPA: 3.58/4.0

University of Michigan **Ann Arbor, USA**
Bachelor of Science in Computer Science Engineering Sept. 2018 - May 2020
GPA: 3.95/4.0

Shanghai Jiao Tong University **Shanghai, China**
Bachelor of Science in Electronic and Computer Engineering Sept. 2016 - Aug. 2018
GPA: 3.6/4.0

EXPERIENCE

Research: *3D Face Model Deformer based on Deep Learning* **Shanghai, China**
Technical Programmer Oct. 2020 - Jan. 2021

- Implemented a face model deformer based on deep differential subspace reconstruction
- Generated random facial expression with a well-designed face model to construct data base
- 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
- Tested model deformer on sets of facial expressions compared with ground truth

Android App Design: *Salinity Map* **Shanghai, China**
Team Leader & Technical Programmer June 2020 - Aug. 2020

- Cooperated with team of five members to rapidly design and implement a map related android application
- Simulated salinity data for water source, and implemented base-map showing data graphics
- Implemented real-time climate data layers including precipitation and wind information with ArcGIS service
- Construct back-end database for user login and data update system

Game Design: *Xtraction Point* **Ann Arbor, USA**
Team Leader & Main Programmer Oct. 2019 – Jan. 2020

- 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
- Maintain a flexible project organization, design interface for prefabs of same type
- Attended Game Design showcase of UM Fall 2019 and achieved 7th/32 for audience voting

Research: *Variant Calling for Genomics Alignment* **Ann Arbor, USA**
Research Assistant & Software Programmer Jan. 2019 – Aug. 2019

- Improved software acceleration for DNA alignment and tested CPU time on core algorithm
- Implemented fixed point probability calculation to improve speed of genome sequencing
- Design corresponding algorithm for fixed point calculation to output the same correct results
- Simulate multi-thread on software algorithm to test time performance
- Improve time performance of new algorithm on FPGA board to three times to original version

Coursework & Projects Sept. 2018 – Present

- 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
- Operating System: Implementation of *thread* library and *memory page* in C++
- Computer Vision: Cancer segmentation for lung images
- Computer Vision: Implementation and test of Faster R-CNN model
- Game Design: Implementation of *Zelda I — Dungeon* and Design of game — *Gemini*

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 Scolarship for JI excellent student Sept. 2016 – May 2017