YIFAN SONG

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MSc in Computer Science interests in CG/CV, System, PL and more.

EDUCATION

MSc, Delft University of Technology **2022 – Present**

- Major in Computer Science

Bachelor of Engineer, Shanghaitech University **2018 – 2022**

- Major in Computer Science and Technology
- PL, Compiler, CG, CV, Program Analysis…

Transfer student, University of Michigan, Ann Arbor, LSA **Feb 2021 – May 2021**

- Numerical Methods, Linear Algebra…

EXPERIENCE

Software Engineer of RhythMo **Sept. 2021 – Aug. 2022**

RhythMo is a start-up technology company focuses on development of lightweight virtual digital human generation and driving technology. I am both a software engineer researching and developing the new CPU only or portable device based monocular RGB motion capture and driven solution.

Internship as Computer Graphics Engineer in Netease Games(Guangzhou) **July. 2021 – Sept. 2021**

Netease Games is an affiliate of NetEase (NASDAQ: NTES). NetEase Games is the 2nd largest game developer worldwide by revenue.

WORK PROJECTS

RhythMo Monocular RGB Based Motion Capture **Jan 2021 – Present**

- Only CPU or single iPhone needed for over 25fps motion capture.
- Able to drive multiple popular human model type including fbx, vrm and much more.
- Full body capture and model driving solution with body, hand and face.

Shaderlab Deserializer **Jul 2021 – Sept 2021**

- A deserialize and serialize library for Unity Shaderlab.
- More comprehensive API than Unity build in serializer.
- Support and extending the ability of Shaderlab.

COURSE PROJECTS

SPH Based Fluid Simulation with Rigid Body Two Way Coupling **Dec 2020**

- Incompressible SPH based fluid simulation with two way coupling with a cube.
- Spatial hash speed up and boundary sph particles for rigid body simulation.
- Implemented in pure C++ and offline rendering with blender.

COOL Compiler **Dec 2018**

- Implementing a compiler with lexical analysis, parsing, semantic analysis, and code generation to MISP.
- Basic semantic and syntax analysis are done and support object oriented programming with inheritance

A Taste of CNN Based Gaze Estimation **Dec 2020**

- A CNN based gaze estimation with almost SOTA accuracy developed with PyTorch.

SKILLS

- Frequently Used PL: C/C++, C#, Python, Lua
- Machine Learning: Tensor Flow, Cuda, Caffe