Zehuan Chen

1420 NW 20th, Corvallis, OR, 97330 | 541-286-8175 | chenzeh@oregonstate.edu | Github: github.com/BiliBiLL

Education

M.S. | 2017 (EXPECTED) | OREGON STATE UNIVERSITY

- Major: Computer Science
- Related coursework: Data Structure & Algorithm, Computer Graphic, Geometric Modeling, Shader Language, Computer Vision, Operating System, Computer Architecture, .software engineering, parallel programming, machine learning.

Skills & Abilities

- Programming languages: C, C++, Java, C#, Python, Haskell.
- Operating system: Linux, Windows.
- Tool: Unity gaming engine, MATLAB.
- Framework: GLSL, OpenGL, openMP.
- Language: Chinese, English

Accomplished Project

UNIX BASED OPERATING SYSTEM APPLICATION PROGRAMMING INTERFACE BY C LANGUAGE

- Archive files compress tool based on UNIX file system.
- Interactive server and client API based on Linux.
- Sharing memory space interface in mutual exclusive way.

GEOMETRIC MODELING

- Implement polygonal meshes visualization and bounding box on 3D object.
- Surface subdivision on 3D object by using irregular scheme and Loop subdivision (ideal situation).
- Surface smoothing by using uniform, cord, mean curvature flow and mean value coordinate scheme, based on Laplace equation.

SHADER AND RENDERING

- 3D scene construction with bloom and HDR effect.

GAME DEVELOPMENT BASED ON UNITY

- Game of “Rolling ball”, “survival shooter”

PARTICIPATE IN PROJECT THE TEMPLATE SCRIPT TESTING LANGUAGE (BASED ON PYTHON)

- Gradually adaptive coding correction method

MACHINE LEARNING PROJECT (BASED ON PYTHON)

- Udacity Machine Learning Engineer Nanodegree program
- Titanic survivors exploration, analysis data and using decision tree to improve the predict accuracy
- Boston housing price prediction, collect price data in Boston and predict the Massachusetts area housing price.

Experience

RESEARCH GROUP | OREGON STATE UNIVERSITY | SEP, 2015 – DEC, 2016

- Follow my advisor working on deformable image registration project and real-world simulation project.

GRADUATE TEACHING ASSISTANT | OREGON STATE UNVERSITY | JANUARY, 2016-NOW

RESEARCH GROUP | OREGON STATE UNIVERSITY | DEC, 2016 – NOW

- Apply deep learning and neural network on computer vision superpixel evaluation.