Yi Guo

3131 Walnut Street, Left Bank Apt 312, PA 19104, PHILADELPHIA, PENNSYLVANIA 19104
● Cell: 2676789430 ● guoyi1@seas.upenn.edu ● https://github.com/GUOYI1,
Github: https://github.com/GUOYI1
Linkedin: https://www.linkedin.com/in/yi-guo-5a379210b/

Professional Summary

- Good knowledge of mathematics, information system, computer graphics and computer science.
- Experienced in Geographic Information System, Computer Graphics and Computer Vision projects
- Excellent C/C++ programming skills
- Strong capability of learning, logical thinking and analyzing.
- Enthusiastic about computer graphics works, especially the physical based rendering, visualization of geo-spatial data and 3D reconstruction.

Intership Experience

- Research Internship, 05/2015 to 10/2015
  Lab of GIS and Remote sensing, Beijing Normal University – Beijing
  Visualization of 3D Geographical Model
  - Hydrological data extraction and analysis using ArcGIS and ENVI.
  - C++ and IDL programming
  - Developed the base architecture and user interface for the demo program
  - Implemented the visualization of 3D geographic model

Skills

- Programming Language: C, C++, C#, Python, IDL, ,SQL, Matlab
- Graphics related: OpenGL, OpenCV, Qt Creator, CUDA, MEL, Maya plugin wizard.

Education

- Master of Science: Computer Graphics and Game Technology, Computer science Department, GPA: 3.9/4.0, Current
  Unversity of Pennsylvania - Philadelphia, PA 19104, US
- Bachelor of Science: Geographic Information System, GPA 3.85/4.0, 09/2012 to 06/2016, Capital Normal University, Beijing, China, 100048.

Project Experience

- ***Fast 3D Reconstruction of Aerial Pictures Based on GPU Parallel Computing***
  University's scientific research project, Capital Normal University, 06/2014-03/2015
  - Efficiently reconstruct the 3D stereo scene from a group of 2D images
  - Graphic Processing with GPU parallel calculation
  - Process includes: camera calibration, feature detection with SIFT algorithm, feature matching, triangulation and feature points densification
  - Implemented the densification part based on an academic article using C++ and C#
- ***Mini Minecraft Game Design***
  Course Project, University of Pennsylvania, 11/2016 – 12/2016
  - Designed a Mini Minecraft game with OpenGL and C++ on the platform of QT creator.
  - Created the scene with Procedural graphics, including Perline Noise and L-system.
  - Implemented the collision detection, physical movement and forest fire effect.
  - Responsible for the implementation of player GUI and interaction.