#### PERSONAL INFORMATION

Name: Guowei Lu/Peter Email: bjfubjfu@gmail.com

Github: <u>Link</u>

#### **PROFILE**

I have been a technical leader with 11 years working experience. I am intending to find a job in 3D field (e.g. geometry processing, graphics rendering and pattern recognition). I am proficient in graphics 2D/3D programming and have a professional experience in performance optimizations.

### PROFESSIONAL EXPERIENCE

### 11/2012 - **Technical Leader**

Now

R&D Department, SuperMap, Chengdu Responsible for web virtual globe engine

- Designed one data specification for rapidly streaming, distributing and rendering large volumes of 3D content
- Implemented performance optimizations for real-time massive model rendering in the Browser
- Worked on data visualization and analysis in the Browser
- Implemented Shader Programming for line styles such as dash/arrow line

# 07/2006 - Engineer & Senior Engineer

11/2012

R&D Department, SuperMap, Beijing

Participated in building mapping module for map application

- Designed and Provided graphics 2D API
- Worked on symbol library and thematic map
- Supported multi-platform environment e.g. Windows, Linux and Android
- Set C++ style guide
- Managed a team of 8 engineers

### Education

09/2002 – Major: Information Management & Information System

07/2006 Degree: **Bachelor** 

School: Information Science & Technology

University: Beijing Forestry University (Project 211 list)

- Relevant Courses:
  - Mathematics: Advanced Mathematics(calculus), Discrete Mathematics, Mathematical Statistics, Linear Algebra
  - Computer Science: Object Oriented Programming Language, Database, Data Structure, Computer Graphics, Operating Systems
- Thesis design: 'Development of small digital image processing software package'(grade: B/Good)
- Average grade: 8/10

### Languages

Mandarin Chinese: Native speaker

English: Fluent (IELTS CEFR Level: C1)

<sup>\*</sup> SuperMap is a GIS software products and services provider and IT enterprise with 3000+ employees

### **PROJECTS**

PROJECTS	
2017	<b>Data Visualization Demos, Hobby,</b> JavaScript, WebGL I created a demo gallery for Cesium with these practical functions and examples. It supports mapbox vector tile, height map terrain and dynamic data visualization.
2016	S3M (Spatial 3D Model), Company, WebGL, C++ I designed a specification for rapidly streaming and distributing large volumes of 3D content. The viewer could view the models at the city level in the browser with many effects such as water reflection.
2016	Data analysis/visualization, Company, WebGL, Shader I applied shader especially stencil buffer and depth buffer to calculate the analytical result for data visualization. Real-time sightline visibility and elevation contour line e.g. (Note: green region is visible and red one is invisible from the viewpoint)
2013	Sunmap, Hobby, C++, cocos2d-x API Using cocos2d-x API I've created a map application for iOS, Android, Windows and Mac OS. It supports basic touch/mouse events, adding custom geometry, selecting map providers and mbtiles for tiles cache.
ACHIEVEMENTS	
2016	<b>Innovation Award</b> SuperMap iClient 3D for WebGL: a virtual globe engine for web applications. Team of 6.
2011	SuperMap iObject for Mobile: a C++ library for mapping application on Android and Symbian. Team of 6.
2008	Mapping Module of SuperMap iObject: a C++ library for mapping application on Windows, Linux and UNIX. Team of 8.

### 2013 Individual Contribution Award

Topic: how to augment map visualization with HTML5 Key Words: UTFGrid, vector tile, heatmap, D3.js

2005 **Innovation E-cup of School** – 2<sup>nd</sup> Place winner

A simple website. Team of 3.

2001 National High School Mathematics League

National 3<sup>rd</sup> prize, provincial 1<sup>st</sup> prize

1998 **110m hurdles & 4\*100m relay** 

1<sup>st</sup> Place winner in the district's sports meeting (more than 15 middle schools)

\* Innovation Award is the biggest team award in my company

### **SKILLS**

- Computer Language
  - o Proficient: C++, JavaScript
  - o Working knowledge: Python, Java, Regular expressions, Shell
- Technologies/Other
  - o Proficient: Virtual Earth, WebGL, OpenGL, HTML5, GDI
  - Working knowledge: Visual Studio, SVN, CMake, OGRE, AGG

## **INTERESTS & ADDITIONAL INFORMATION**

- A contributor to Cesium Project, contribution ranking:48/141
- A technical writer with 600+ subscribers currently
- Reading, writing, coding, travelling