# **Iason Manolas**

## About me -

I am an electrical and computer engineering graduate with strong emphasis on geometry processing and C++.

# Language Skills —

English—FCE Cambridge German—Bilingual, GZ C1 Greek—Native Speaker

#### Education

2011–2018 Diploma of Electrical and Computer Engineering University of Patras,

Greece

Focus on Geometry Processing, Diploma grade: 7.34/10, Masters part

grade: 8.6/10

2016 Erasmus+ studies Vrije Universiteit Brussel, Belgium

Department of Electronics and Information Technology Engineering

2008-2011 High school Athens, Greece

Specializing in mathematics, programming and physics.

### **Publications**

2018 SHREC18: Recognition of Geometric Patterns Over 3D Models
2018 CyberWorlds18: Parallel 3D Skeleton Extraction Using Mesh Segmen-

tation

#### Projects

As a student I mainly focused on C++, OpenGL and geometry processing, by completing related projects as well as my thesis.

The first project had to do with creating algorithms associated with visualizing the curvature and the convex hull of 3D models using GeoLib.

The second project had to do entirely with OpenGL and C++, in which I had to implement things like ray cast picking, color brushes and 3d model user defined mesh deformation.

The third is my diploma thesis, in which I used OpenGL, GLSL, Qt, CGAL, Boost, Eigen and was implemented entirely in C++. It's topic was the design and implementation of a novel parallel skeletonization algorithm. My supervisor was Mr.Konstantinos Moustakas and I got assisted by Mr. Aris Lalos.

For more details you can checkout my github page and/or my blog.

### Technical Skills

C++ This is my main and favorite language. Confident using the STL, first steps in generic programming. Eager to follow the latest standards

and coding conventions.

CGAL I used this fantastic computational geometry library in my thesis quite

a bit and I am able to understand and deploy some of its packages. I am familiar with their code base since I delve into their github repository whenever I want to know more about the insides of an algorithm

or data structure.

OpenGL Experience in both the modern and the old OpenGL API through visu-

alizing 3D models in my projects and through use in my thesis.

GLSL Experience with creating basic shader programms. Introductory

knowledge of the graphics pipeline.

Linux I am a linux user for the last two years. Linux gave me the confidence

of using the terminal and understanding more about computers in general. My developing environment consists mainly of vim and tmux.

## Working Experience

2018 C++ Software Engineer for ADAS at Carmeg GmbH Berlin, Germany

I am part of a 10 member team working on the referencing of different car sensors which are used for the evaluation of autonomous driving  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ 

algorithms.

2017 Software Engineering internship on medical imaging at Innora

Athens, Greece

3D visualization of CT scans using WebGL and javascript.