Maurice Tollmien
Curriculum Vitae

PERSONAL DETAILS

Name	Maurice Tollmien
Address	Bahnhofstrasse 57
	Germany - 22880 Wedel
Telephone	+49 176 34622374
E-mail	maurice.tollmien@gmail.com
Date of Birth	22.10.1989
Nationality	German
Languages	German: Native speaker.
	English: Highly proficient in spoken and written English.
	French: Good working knowledge.

OPEN SOURCE PROJECTS

I am and have been working on a wide variety of Open Source Projects. Most of them to the subject of OpenGL, Computergraphics, VR and Artificial Intelligence. Some example projects are:

- Pressure based Water Simulation (with reflection/refraction (GLSL))
- Particle based Cloth Simulation
- Screen-Space ambient occlusion (SSAO)
- Particle Simulation on GPU (Compute Shader)
- Delaunay triangulation and Voronoi partitioning of images
- Quaternions (low-level C library)
- Joysticks (low-level C library)
- USB-XBox controller (C library)
- Artificial Neural Network library

For a detailed and more complete list, please see the appended document or visit the following link as a complete listing would go beyond the scope of this document:

`https://github.com/MauriceGit/Organisation/blob/master/projects.pdf`

PRIMARY SKILLS

Languages

I am experienced and proficient in C/C++, Python and GLSL but used a large variety of other languages in my projects, like Go, Haskell, Erlang, Shell, C#, SQL and others.
I am familiar with imperative, object-oriented, functional and numerical programming languages and the concepts behind them.

Technologies

Deriving from my projects and studies my main competence can be summarised to Computergraphics (OpenGL pipeline and Graphics programming including the mathematical background, GPU programming and Shaders) and Artificial Intelligence (Complex tree pruning and technologies for two player games, Artificial Neural Networks, logical agents and multithreading in tree searches).

Conference-Talks

I gave a Technical Talk on the Google-Developer-Group Conference (GDG DevFest, October 2016) in Hamburg, Germany on my current research and Master Thesis subject: ***Illumination of density volumes with Neural Networks***.

EDUCATION

2014 - 2016

MSc, Computer Science, University of applied Sciences Wedel (Focus on Computergraphics and IT-Security)

2010 - 2014

BSc, Computer Science, University of applied Sciences Wedel (Focus on Computergraphics, applied Mathematics and Physics Animation)

WORK EXPERIENCE

2015 - 2016

Secucloud - Applied Cryptography and IT-Security. Implementing E-mail encryption and asynchrone E-mail delivery in Erlang as well as IT-Security systems and Cryptography for large telecomunication companies (Telekom, Vodafone) next to my MSc studies.

2014 - 2015

SPI - Sheet Metal Unfolding (CAD). Developing tools and addons for Autodesk Inventor and SolidWorks for 3D virtual sheet metal cutting and hierarchical decomposition of objects into 2D parts next to my MSc studies.

2013

OTTO GmbH - Software Development. Six months working on Linux bash automation, PL/SQL, Java and Webservices next to my BSc studies.

PERSONAL PROFILE

I am very determined and highly motivated to solve complex problems, as seen by many of the Open Source projects, I conducted in my free time and for university. The accomplishment of this mindset is, combined with always finishing what I start, one of my biggest personal achievements.
Besides my professional career and computer science interests, I like to spend time outside, with friends or doing sports. About once a year I start a practical project to balance out the time I spend on programming inside. That includes designing and building kites, building a kitesurf board or custom furnature for my appartment, to name a few.
Other than that, I like to organise or participate in programming contests.

REFERENCES

Referees or references can be provided upon request.