

Stefan Eilemann

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PROFILE Independent C++ software engineer and architect, with a specialization in high performance 3D graphics, parallelization of applications and distributed systems. Consultant and contractor delivering solutions and expertise to enhance existing applications and to create new software.

PROJECTS **2005-2006**
Started Equalizer, an open source project for the development and deployment of scalable graphics applications on visualization clusters, based on OpenGL, C++, TCP/IP and pthreads. Work includes software engineering, coordination as well as communication and evangelising the project. Currently working with key industry players to establish and mature Equalizer.

Implemented various features in a six-month part-time (50%) project to enhance the scalability of a parallel rendering toolkit on SGI Prism systems. Key features are the implementation of two new parallel recomposition algorithms, one GPU-based and one CPU-based, as well as architecture-specific tuning.

2004-2005

Senior software engineer contributing to the design and development of a Java-based LCDUI implementation for MIDP 2 devices. The implementation uses a CSS-based file format to dynamically configure the Look&Feel of the user interface.

2004

Development of a fully functional 3D phone simulator for Java software running on mobile phones for marketing presentations. Completed project under tight schedule for a trade show within two months, using C++ and OpenSceneGraph.

2003

Software engineer in a three-man/three-month project to create a distributed shared memory and synchronization API for Linux clusters, based on C++, TCP/IP and pthreads. Worked with another team developing an OpenGL Performer demo based on this API.

2000-2003

Technical lead engineer for a three-man team developing and maintaining a parallel rendering toolkit based on OpenGL, C++, pthreads and various SGI-specific technologies. Responsible for all technical aspects of the project, like feature definition and prioritization, design, implementation, coaching, code reviews, documentation, as well as interfacing to other internal projects, technical publications and customer support.

2000

Implemented a network configuration management tool using Linux, Apache, MySQL and Perl for an internet service provider.

1995 - 2000

Worked as intern and later as full-time software developer on a graphics subsystem of a simulation software. Implemented new features in the old subsystem based on PHIGS, evaluated a new graphics API and started the migration to Open Inventor, the selected toolkit.