

Sven Göthel

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Education

Bielefeld University of Applied Sciences, Germany.

Dipl.-Ing. (FH); Diplom Engineer, Applied Science (Equivalent to MASc), January 1998

Work Experience

Extract

Complete @ <http://cv.jausoft.com>

Embedded and high performance systems, computer graphics, multimedia, multi-tier, parallel computing, compiler impl., UML, C++, C, Java, POSIX, et al.

09/2009 – today

Sole Proprietor

JogAmp, high performance Java libraries for 3D graphics, multimedia and processing, providing JOGL/OpenGL for desktop and mobile platforms, JOCL/OpenCL, et al.

08/2007 – 09/2009, Staff Engineer

Sun Microsystems, Inc.

Design and realization of Plugin3, technical team lead. Abstraction of the windowing toolkit, allowing 3rd party implementations and custom bootstrapping. Enhancing startup time to factor 3 – 13 (new load - reload).

Experimental JavaFX 3D and media scenegraph, utilizing cross platform hardware accel. using OpenGL ES 1.1/2.0, GL 2 and OpenMax. Adding support for Maya's normal maps.

New Java Plug-In refactoring and integration of JNLP support. Adding Unix Domain Sockets for the client/server IPC and stabilizing the client/server communication. Specifying the JNLP extension and help with the test framework extension. Generalizing JOGL's native windowing system architecture.

06/2005 – 07/2007, Senior Engineer

Contractor since 11/2006

ATI/AMD

Team lead, design and implementation OpenGL Console Driver for GL 1.5, ES1.1 and ES2.0.

Customer requirements and realization of feature and high performance customer requests.

Overall system analysis, performance enhancement: 250% (TLS, inline, caching, dispatch table, stream copy, ..). Hardware overlay, asynchronous ReadPixel, GLSL/DMA texture transfers, page flip and VSync, OpenGL interfacing, R3xx, R5xx and R6xx support, Linux kernel driver enhancements (multi DMA, memory leaks, PCI alias, ..). SDK and demo infrastructure, multimedia demo and customer support.

11/2001 – 06/2004 Consultant

Harman/Becker Automotive Systems

Creating an embedded multimedia platform for QNX/SH4. Implementing an A/V device driver for our customized DSP to stream A/V. Compatibility with the Linux DVB-API, enables open-source applications. Evaluation Linux-SH for the SH4 development platform. Implementing PCI/IRQ management and adapting a BootP/NFS infrastructure inclusive the BSP.

Technical lead OSGI Car Remote Control using C/S bundles running on a J2ME platform, incl. RSA encryption, authentication and SHA1 integrity, as well as interfacing with a GPS receiver and the auto's MOST bus. Technical lead XFree86 driver implementation for Scarlet Fujitsu MB86291 and Siliconmotion Lynx3DM incl. 2D and video (YUV) hardware acceleration plus it's QNX/SH4 adaption. Embedded AWT implementation for J2ME, running on a embedded X-Server.

Technical lead Location Based Premium Services (Usability). System design and evaluation of an XML based application server, with strict content (XML) and code (XSP) distinction using Cocoon, J2EE, Apache and GPS data.

06/2000 – 10/2000 Consultant

Desys GmbH

3D Scenegraph-API for Java, using OpenGL for Java. Imports VRML structures and interfacing the native C++ implementation with Java.

06/1997 – 10/1998 Consultant

Siemens AG

Design and realization of a multithreaded upgrade process in SDL and C++ for the embedded target platform VxWorks/680xx, XpressLink DSL project. New firmware must be pushed to the home based modems.

04/1994 – 08/1995 Consultant

Prekwinkel AG

Creating a C-like bytecode compiler, allowing customer to program their geometric and process optimizations for their CNC target machines, inc. CNC crosscompiler.

Various

Open Source / Community

OpenGL driver for MAME and MPlayer; VDR's DVD player & AC3 bitstreamout plugins; Genetic Algorithm C++ Library & Demos; C/S Networking support; GL4Java (OpenGL for Java), etc. ..