

KATRIN SCHMID

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EU citizen, Australian Permanent Resident, H1B USA

I am an experienced software engineer developing applications in computer graphics, asset and render management. I have worked with large and legacy code bases as well as finding ad hoc and long term solutions to our users problems.

In the past decade I have mostly worked internationally on mission-critical software for major animated and visual effects heavy films like Mortal Engines, War for the Planet of the Apes, Deadpool, Ice Age 4, Independence Day 2, X-Men: Apocalypse, Harry Potter 7, Captain America, Thor and Rio 2..

EMPLOYMENT

Weta Digital Wellington, New Zealand

since 2016

Senior Software Engineer

- Fully parametric plant and tree procedural for editing and rendering detailed trees and large scale vegetation and landscapes in new render software
- Developer for the lighting and rendering pipeline, in charge of the crowd render system
- Set up departments software testing automation and CI framework

Digital Domain Vancouver, Canada

2015 - 2016

Senior Software Engineer

- Modernize, extend and speed optimize deferred rendering, crowd and environment system for very large scene rendering to allow consistent results across multiple production sites
- Distributed rendering setup for Vray and Mantra renderers
- Involved in introducing test driven development workflow and code standards

Dreamworks Animation Glendale, USA

2014 - 2015

Senior Software Engineer

- New custom Look development, Surfacing and Modeling pipeline for Oriental Dreamworks
- Full Mari (texture paint) to Katana bridge to allow fast Arnold rendering with asset system integration and UDIM support through all stages of the pipeline

Blue Sky Studios - 20th Century Fox Greenwich, USA

2011 - 2014

Software Engineer

- Adapted and extended open source Alembic geometry file format for the studio's needs
- Improved lighting and render pipeline to enable efficient parallel production of 3 feature films
- Data base centric dependency tracking system for 18 millions+ files per film reducing time for data caching, rendering and streamlining hand-offs. Coordinated data integration with departments.
- Mentored new developers and trainees

Fuel VFX (now part of Animal Logic), Sydney, Australia

2010 - 2011

Senior Effects Pipeline Engineer

- Lead the transition of Windows based tools pipeline to Linux
- Optimized render farm management and software to unify administration, ease of usage and reduction of render times, designed pipeline for new 3D visual effects software package
- Custom OpenEXR image tools development

Rising Sun Pictures Adelaide, Australia

2010

Software Engineer

- Designed plug-ins and extended functionality of in-house geometry cache format for data exchange between departments, commercial software packages and cloud render farm
- Significantly optimized speed of in-house OpenGL viewer for the Maya viewport

Dr. D Studios Sydney, Australia 2008 - 2009
Software Engineer
• Developed general and motion capture data tool set, plug-ins for geometric constraints and pre-visualization shot management system
• Created Preview, Movie player and Editing system integration for streamlined review

Ilion Animation Studios Madrid, Spain 2008
Software Engineer
Developed visual effects tools and file translator plug-ins in C++

Realtime Technology AG, now 3DEXCITE
(part of Dassault Systèmes), **Munich, Germany** 2005 - 2008
Tool Developer
Workflow automatisisation and technical problem solving

Plan-b media AG (now MindMatics AG) Cologne, Germany 2004 - 2005
Product Manager, Mobile Video

EDUCATION

University of Newcastle Newcastle, Australia 2012 - 2013
Master degree in Information Technology with Distinction
Focus on Data Analysis and Statistics, Data Mining,
Requirement Analysis and Project Management. **GPA: 7** (out of 7)

University of Sydney, Australia 2011
Graduate Certificate in Information Technology
Focus on Analysis, Modeling, Algorithms and Complexity, Java

Harvard University, Extension School Boston, USA 2010 - 2011
Postgraduate student in Parallel Computing and Computer Graphics

Bauhaus Universität Weimar, Germany 1999 - 2003
Bachelor in Media Engineering

Fern-Universität Hagen Hagen, Germany 1997 - 2003
Bachelor in Economics, distance education part-time

TECHNICAL SKILLS

- Languages: C++, Python, MS and SQL, XML, Yaml, Json, UML
- Graphics Software (APIs and Scripting): Major commercial 3D and 2D packages, scripting and APIs (Maya, Katana, Nuke, Mari), OpenGL, Editorial and image player software, several Renderman and Ray-tracers renders APIs
- Technologies: STL, Boost, Qt/PySide, Local and distributed Asset and Project tracking database software and systems, common image and geometry formats like Alembic, OpenEXR, various Renderfarm and Software configuration systems, SPSS

FREELANCE AND OPEN SOURCE PROJECTS

- Motion control camera import plug-ins for Houdini for Robot VFX
- Freelance Developer for Remote Render Service of Skeej S.r.l.
- Contributor to openPipeline by Kickstand