Jan Phillip Tiesel

126 Freedom Road · Scott, LA 50783
E-mail info@jptiesel.de · *Phone* (260) 255-7946 · *Portfolio* www.jptiesel.de

SUMMARY

Software development expert with strong background in Computer Graphics and distinctive research experience. Goal-oriented communicator with attention to detail and excellent problem-solving skills.

EXPERIENCE

Software Engineer, *La-Well GmbH,* Bünde, Germany, 09/2009 – present
- Full development cycle of digital signage system utilized in German health care sector (client/server-based application using Microsoft .NET, Adobe Flash, MySQL, Python), successfully deployed >200 installations generating $600K company revenue
- Decreased time to market by optimizing in-house DB and media asset management tools
- Provided 2nd level customer support and technical training to sales personnel
- Supervised two undergraduate students on their thesis project

Graphics Software Engineer, under contract to *University of Louisiana at Lafayette*, 05/2009 – 08/2009
- Added novel 3D lens visualization tools to existing real-time graphics software used for interpretation of time-varying data sets

Research Assistant, *Virtual Reality Laboratory, University of Louisiana at Lafayette*, 08/2007 – 05/2009
- Designed and implemented visualization software for immersive Virtual Reality displays (e.g., tools for interactive composition of GPU shading effects using C++, OpenGL, GLSL)
- Authored research articles on novel rendering, visualization, and GPU techniques
- Successfully collaborated with geologists and hydrologists on R&D visualization system utilized by domain experts for scientific interpretation and recognized at industry conferences
- Prepared and presented real-time graphics demos to industry and academic audiences (e.g., Seismic Micro-Technology, BP, IEEE VR conference) employing multi-machine visualization clusters

Software Developer, *Self-employed*, 06/2006 – 08/2007
- Successfully ran web consulting business providing implementation of websites, e-shops, and interactive advertisements (employing PHP, MySQL, Flash, various CMS), annual turnover $30K

EDUCATION

Master of Science – Computer Science, University of Louisiana at Lafayette, 05/2009, GPA: 4.0

Bachelor of Science – Digital Media, University of Bremen, Germany, 06/2006, Diploma Grade: A

Study abroad program – New Media, Indiana University Purdue University Indianapolis, 12/2005

SKILLS

- Over 7 years of experience in object-oriented programming languages (C++, Java)
- Cross-platform implementation, testing, and debugging experience (Windows, Unix)
- Practical knowledge of software engineering and project management principles and tools

- Strong 3D math and Computer Graphics background
- 2 years experience implementing real-time rendering and virtual reality applications using OpenGL as well as high-level scene graph systems and toolkits (OpenSceneGraph, VR Juggler)
- Practical experience in 3D interaction techniques, 6-DOF input devices, stereoscopic visualization
- Familiarity with geological coordinate systems and data formats (e.g., LIDAR)

- Proficient use of high-level scripting languages (Python, Maya MEL, Unix shell, PHP)
- Familiarity with modern UI toolkits (Adobe Flash, Java Swing, Microsoft .NET Forms, Nokia Qt)
- 6 years of hands-on experience with 2D and 3D asset creation tools (e.g., Photoshop, Illustrator, Flash, AfterEffects, Maya)

- Capacity for working in a fast-paced environment and delivering on a deadline-oriented schedule
- Proven verbal and written communication skills (university level teaching, research publications)
- Strong teamwork and social skills (including 8 years experience as youth work volunteer)
- Fast learner with strong ability to quickly attain in-depth understanding of complex subjects

SELECTED
PUBLICATIONS

Real-Time Rendering Method and Performance Evaluation of Composable 3D Lenses for Interactive VR.
IEEE Transactions on Visualization and Computer Graphics, May/June, 2010.

Single-Pass 3D Lens Rendering and Spatiotemporal "Time Warp" Example.
Proceedings of IEEE Virtual Reality 2010.

Single-Pass Rendering of Composable Volumetric Lens Effects.
ACM SIGGRAPH 2009 Posters.

Using Parallel GPU Architecture for Simulation of Planar I/F Networks.
Proceedings of the International Joint Conference on Neural Networks 2009.

Composable Visual and Temporal Lens Effects in a Scene Graph-based Visualization System.
Master's Thesis, University of Louisiana at Lafayette, 2009.

Imaging Digital Well-logs in 3-D Virtual Reality: Investigation of Northern Louisiana Wilcox Fluvial/
Coal Strata for Coalbed Natural Gas. *Gulf Coast Association of Geological Societies Transactions, vol. 58.*

HONORS

- Member of Phi Kappa Phi, Collegiate Honor Society. *April 2009 – present*
- Academic Excellence Achievement, University of Louisiana Honors Program. *Spring 2009*

EMPLOYMENT
INFORMATION

Authorized to work in the U.S. (Lawful Permanent Resident)