

CURRICULUM VITAE

Tobias Schafhitzel

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Education

- 2004 - 2008 Ph.D. candidate in Computer Science
Focus on flow visualization
Institute of Visualization and Interactive Systems
University of Stuttgart, Germany
- 1998 - 2004 Student of Computer Science
Focus on visualization, computer graphics and programming languages
Diploma in Computer Science
University of Stuttgart, Germany
- 1995 - 1998 High school student
High school diploma
Technisches Gymnasium der Max Eyth Schule Kirchheim, Germany

Professional Career

- 03/2009 - present System Engineer
Algorithms for Avionics Systems
Visualization, flight navigation, height field processing
EADS Germany, Friedrichshafen
- 12/2004 - 12/2008 Research Assistant
3D visualization and computer graphics:
Focus on flow visualization and ray tracing
Scientific projects, teaching, and publishing
Visualization and Interactive Systems Institute
University of Stuttgart, Germany
- 07/2002 - 11/2004 Student Assistant
Software development for visualization applications
Focus on volume rendering, flow visualization, and ray tracing
Author of an English e-Learning script
Institute of Visualization and Interactive Systems
University of Stuttgart, Germany
- 12/1998 - 06/2002 Student Assistant
Software development for a commercial GUI-based
programming language, project work, and software support
ISA Tools GmbH, Germany

Skills

Languages. German (native speaker), English (fluent) and French (school knowledge).

Computer programming. Experience in C/C++, Graphics APIs and Graphics Hardware programming (OpenGL, DirectX, GLSL, Cg and HLSL, ASM) on MS Windows and Linux/Unix. Familiar with Java, QT, HTML, XML and JavaScript.

Operating Systems. Windows, Linux/Unix and MS Dos.

Other. Very good at creative tasks, team-work, and experienced in dealing with tight deadlines. Experience in organizing and supervising projects. Knowledge in fluid dynamics.

Private Interests

Sport Trekking, climbing, alpine skiing, and biking.

Music Making music (guitar, drums).

Literature Reading contemporary literature and technical literature.

Traveling Get to know other cultures and landscapes.

Professional Interests

Flow visualization Real-time methods, texture-based flow visualization, feature extraction, and visualization of coherent structures.

Ray tracing General ray tracing, GPU-based ray tracing, non-linear ray tracing, ray casting.

Volume rendering Multi-field rendering, scalar field visualization, medical visualization.

Real-time computer graphics

General-purpose computation using graphics hardware

References

Prof. Dr. Daniel Weiskopf
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Prof. Dr. Thomas Ertl
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