

Curriculum Vitae

Personal Information

Name: Stefan Jeschke
Academic Degree: Dipl.-Inf. Dr. Ing.
Address: Favoritenstrasse 9-11, 1040 Vienna, Austria
Email: jeschke@cg.tuwien.ac.at
Date of birth: May 7, 1977 in Rostock, Germany
Languages: German, English

Education

1983 - 1987 Elementary School (Grundschule) in Dierhagen
1987 - 1991 Secondary School (Polytechnische Oberschule) in Wustrow
1991 - 1995 Secondary School (Gymnasium) in Damgarten
June 1995 Graduation (Abitur)
1995 - 2001 Studies in Computer Science at the University of Rostock, Germany, with special emphasis on Computer Graphics
September 2001 Graduation as “Diplom-Ingenieur der Informatik” from the University of Rostock (Thesis: “Impostors for rendering acceleration”)
April 2002 Doctoral program (Graduiertenkolleg of the DFG) at the University of Rostock
March 2005 PhD degree (summa cum laude) at the University of Rostock (Thesis: “Accelerating the Rendering Process using Impostors”)

Professional

Nov 1998 – March 1999 Working for Philips Medical Systems in Hamburg
May 1999 – May 2000 Working for University of Rostock, Computer Graphics Department
Oct 2001 – Feb 2002 Research assistant at Vienna University of Technology
March 2002 – April 2005 PhD student at University of Rostock, Computer Graphics Department
April 2005 – Oct. 2007 Research assistant at Vienna University of Technology (FWF project ‘Treeluminatıon’)
Oct. 2007 – May 2009 Visiting assistant professor at Arizona State University (Phoenix, Arizona)
Since May 2009 Research assistant at Vienna University of Technology (FWF project ‘Desiree’)

Research service

- Reviews for: Siggraph, Siggraph Asia, Eurographics, Eurographics Symposium on Rendering, TVCG, Computer Graphics Forum, Symposium on Interactive 3D Graphics and Games, Pacific Graphics, Graphics Interface, IEE Symposium on Interactive Raycasting, Graphite, Computers and Graphics, VAST, Computer Graphics and Applications, Computer Graphics International, GRAPP, WSCG, SSCG
- IPC Member: Eurographics Symposium on Rendering (2008, 2009, 2010), WSCG (2012), Eurographics Posters (2012), Pacific Graphics (2012), ISVC (2012)
- Paper Review Chair for CESC (2006, 2007)

Publications

1. Thomas Auzinger, Michael Guthe, Stefan Jeschke:
Analytic Anti-aliasing of Linear Functions on Polytopes.
In *Computer Graphics Forum* (Eurographics 2012). May 2012.
2. Stefan Jeschke, David Cline, Peter Wonka:
Estimating Color and Texture Parameters for Vector Graphics.
In *Computer Graphics Forum*, volume 30, number 2, pages 523-532, 2011. (2nd best paper award at Eurographics 2011)
3. Stefan Jeschke, David Cline, Peter Wonka:
Rendering Surface Details with Diffusion Curves.
In *ACM Transactions on Graphics*, volume 28, number 5, pages 1-8, 2009.
4. Stefan Jeschke, David Cline, Peter Wonka:
A Laplacian GPU Solver for Diffusion Curves and Poisson Image Editing.
In *ACM Transactions on Graphics*, volume 28, number 5, pages 1-8, 2009.
5. David Cline, Stefan Jeschke, Anshuman Razdan, Kenric White, Peter Wonka:
Dart throwing on surfaces.
In *Computer Graphics Forum*, volume 28, number 4. pages 1217-1226, 2009.
6. Pushpak Karnik, David Cline, Stefan Jeschke, Anshuman Razdan, Peter Wonka:
Route Visualization using Detail Lenses.
In *IEEE Transactions on Visualization and Computer Graphics*, volume 16, number 2, pages 235-47, 2009.
7. P. Karnick, S. Jeschke, D. Cline, A. Razdan, E. Wentz, P. Wonka:
A Shape Grammar for Developing Glyph-based Visualizations.
In *Computer Graphics Forum*, volume 28, number 8, pages 2176-2188, 2009.
8. Deepali Bhagvat, Stefan Jeschke, David Cline and Peter Wonka:
GPU Rendering of Relief Mapped Conical Frusta.
In *Computer Graphics Forum*, volume 28, number 8, pages 2131-2139, 2009
9. Paul Guerrero, Stefan Jeschke and Michael Wimmer:
Real-time Indirect Illumination and Soft Shadows in Dynamic Scenes Using Spherical Lights.
In *Computer Graphics Forum*, 27(8):154-168, October 2008.
10. Daniel Scherzer, Stefan Jeschke and Michael Wimmer:
Pixel-Correct Shadow Maps with Temporal Reprojection and Shadow Test Confidence.
In *Rendering Techniques 2007 (Proceedings Eurographics Symposium on Rendering)*, pages 45-50, June 2007.

11. Stefan Jeschke, Stephan Mantler and Michael Wimmer:
Interactive Smooth and Curved Shell Mapping.
In *Proc. EUROGRAPHICS Symposium on Rendering*, June, 2007, Grenoble, France.
12. Ralf Habel, Michael Wimmer and Stefan Jeschke:
Instant Animated Grass.
In *Journal of WSCG* 15(1-3), pages 123-128, Jan. 2007.
13. Stephan Mantler and Stefan Jeschke:
Interactive Landscape Visualization Using GPU Ray Casting.
In *Proc. of Graphite 2006*, November 2006.
14. Stefan Jeschke, Michael Wimmer and Werner Purgathofer:
Image-based Representation for Accelerated Rendering of Complex Scenes.
In *Eurographics 2005 State-of-the-Art-Reports*, pages 1-20, August 2005.
15. Stefan Jeschke, Michael Wimmer, Heidrun Schuman and Werner Purgathofer:
Automatic Impostor Placement for Guaranteed Frame Rates and Low Memory Requirements.
In *Proc. Symposium on Interactive 3D Graphics and Games*, pages 103-110, Washington DC, april, 2005.
16. Stefan Jeschke and Michael Wimmer:
Textured Depth Meshes for Real-Time Rendering of Arbitrary Scenes.
In *Proc. EUROGRAPHICS Workshop on Rendering*, june, 2002, Pisa, Italy.
17. Stefan Jeschke, Michael Wimmer and Heidrun Schuman:
Layered Environment-Map Impostors for Arbitrary Scenes.
In *Proc. Graphics Interface*, pages 1-8, may, 2002, Calgary.
18. Uwe Rauschenbach, Stefan Jeschke and Heidrun Schuman:
General rectangular fisheye views for 2D graphics.
Computers&Graphics 25 (4), pages 609-617, 2001.
19. Uwe Rauschenbach, Stefan Jeschke and Heidrun Schumann:
General Rectangular FishEye Views for 2D Graphics,
In: *IMC'2000 - Workshop on Intelligent Interactive Assistance and Mobile Computing*,
Rostock-Warnemünde, Germany - November 9-10, 2000.

Talks at Conferences

1. Estimating Color and Texture Parameters for Vector Graphics.
Eurographics Conference, April 2011.
2. Rendering Surface Details with Diffusion Curves.
ACM Siggraph Asia, Yokohama (Japan), December 2009.
3. Interactive Smooth and Curved Shell Mapping.
Eurographics Symposium on Rendering, Grenoble (France), June 2007.
4. Interactive Landscape Visualization Using GPU Ray Casting.
Graphite 2006, Kuala Lumpur (Maaysia), November 2006.
5. Image-based Representations for Accelerated Rendering of Complex Scenes.
Eurographics Conference, Dublin (Ireland), August 2005.
6. Automatic Impostor Placement for Guaranteed Frame Rates and Low Memory Requirements.
Symposium on Interactive 3D Graphics and Games, Washington DC (ASU), April 2005.

7. Textured Depth Meshes for Real-Time Rendering of Arbitrary Scenes.
Eurographics Workshop on Rendering, Pisa (Italy), June 2002.
8. Layered Environment-Map Impostors for Arbitrary Scenes.
Graphics Interface, Calgary (Kanada), May 2002.

Invited Talks

1. Estimating Color and Texture Parameters for Vector Graphics.
Institute of Information Theory and Automation, Academy of Sciences of the Czech Republic, Prague, Czech Republic, July 2011.
2. Estimating Color and Texture Parameters for Vector Graphics.
Intitute for Computer Graphics, University of Rostock, Germany, April 2011.
3. Rendering Diffusion Curves in 2 and 3 Dimensions.
Max Planck Institute for Informatics, Saarbruecken, Germany, October, 2010.
4. Diffusion Curve Rendering in 2D and 3D.
Czech University of Technology, Prague, Czech Republic, October 2009.
5. Mein Weg danach.
40 years of Computer Graphics at University of Rostock, Germany, September 2009.
6. Image-based Representations to Accelerate the Rendering of Complex Scenes.
Czech University of Technology, Prague, Czech Republic, June 2005.
7. Textured Depth Meshes for Real-Time Rendering of Arbitrary Scenes.
Konversatorium of the Computer Graphics Group in TU-Vienna, Austria, June 2002.

Awards

2nd best paper award at Eurographics 2011 for the paper
“ Estimating Color and Texture Parameters for Vector Graphics”

(Accepted) Project Proposals

- 2006 FFG BRIDGE: “SCANOPY” cooperation between Vienna University of Technology and Imagination Computer Services Gmbh
- 2007 FWF: “DESIREE” at Vienna University of Technology
- 2009 Ludwig Boltzmann Institute for Archaeological Prospection and Virtual Archaeology (partly involved)

Teaching

- Supervised diploma thesis at University of Rostock: Gerke Preussner (2004)
- Supervised diploma theses at Vienna University of Technology: Daniel Khankan (2005), Paul Guerrero (2007), Georg Selig (2008), Marcel Nuernberg (2011)
- Supervised masters thesis at Arizona State University: Deepali Bhagvat (2008)

- Supervised practical at Vienna University of Technology: Georg Selig (2005), Paul Guerrero (2006), Clemens Brandorff (2006), Simona Arustei (2006), Florian Rudolf (2007), Florian Reiterer (2007), Thomas Kment (2007), Wolf Reitsamer (2007), Daniel Prieher (2011)
- Seminars held at Vienna University of Technology: “*Forschungsseminar aus Computergraphik und Bildverarbeitung*” (WS 2005, WS 2009, WS 2010, SS 2011), “*Seminar aus Computergraphik*” (SS 2007, WS 2012), “*Seminar mit Bakkalaureatsarbeit*” (SS 2005, WS 2006),

Conference and Workshop Organization

2006 Local organizer of the “3rd Eurographics Workshop on Sketch-based Interfaces and modeling” (conference chair: Joaquim Jorge (P))

February 2012, Vienna (Austria)