

## Eduard Zell

[mail@eduardzell.com](mailto:mail@eduardzell.com)

[www.eduardzell.com](http://www.eduardzell.com)

SKILLS	Expert	Intermediate
Programming	C++, OpenGL, OpenCL	CUDA, Python, HTML, CSS, R, CMake
APIs	Qt, AR-Toolkit	Eigen, Mel, Tress FX
Software	Maya, Hairfarm, GIMP	Unreal Engine, Houdini, 3ds Max, Nuke
Languages	German, English, Russian	Spanish

### WORK EXPERIENCE

- Oct. 2010 – Sept. 2016 **Assistant Researcher and PhD Student – Germany**, University Bielefeld
- R&D on 3d scanning, editing, animating and rendering virtual faces
  - established collaborations with research labs in Spain, Ireland, Korea
  - developed custom software for Adidas
  - co-developed a VR-system for stroke patient rehabilitation
  - interdisciplinary research on facial perception of digital characters
  - held lectures in game development and real-time rendering
- Nov. 2015 – May 2016 **Project Head – Germany/Turkey**, SUN start-up network  
organized with a team a trip consisting of 15 company visits and three networking events to connect with Istanbul's start-up community
- June 2013 – Sept. 2013 **Visiting Researcher – South Korea**, KAIST, Daejeon  
researched and published work on facial animation retargeting
- Aug. 2008 – Aug. 2009 **Software/Shader-Developer – Austria**, Vizrt, Schwaz  
coded 3d computer graphics software for TV studios
- Sept. 2006 – Feb. 2007 **3D-Artist (Internship) – Germany**, RTT (now 3DExcite), Munich  
real-time visualizations for Ferrari, Volkswagen or Audi
- June 2004 – Sept. 2004 **Clay-Animator (Internship) – Germany**, IfNM, Rostock

### EDUCATION

- Oct. 2010 – June 2017 **PhD in Computer Graphics – Germany**, Bielefeld
- Sept. 2009 – Aug. 2010 **Computer Animation and Visual Effects (MSc.) – UK**, Bournemouth
- Sept. 2005 – Feb. 2009 **Computer Science and Media (BSc.) – Germany**, Furtwangen
- Feb. 2008 – July 2008 **Software Engineering (study abroad) – Spain**, EPI Gijón
- June 2004 **University-entrance diploma – Germany**, Rostock

### SCHOLARSHIPS

- July 2013 – Aug. 2013 DAAD-NRF-Summer Institute Program (abroad stay in South Korea)
- July 2007 – Aug. 2010 "Evangelisches Studienwerk" (scholarship for outstanding students)
- Mar. 2008 – Mar. 2011 e-fellows (scholarship for high-potentials)
- Feb. 2008 – July 2008 ERASMUS (abroad stay in Spain)

## AWARDS

Mar. 2015	FameLab NRW (2 <sup>nd</sup> Place) – worldwide science communication competition
Sept. 2013	Eurographics Medical Prize (3 <sup>rd</sup> Place)

## VOLUNTEER

Oct. 2012 – Oct. 2014	coordinator within the alumni network of the "Evangelisches Studienwerk"
2003 – 2008	various volunteer positions (e.g. student representative, youth leader)
Oct. 2004 – June 2005	Civil service (taking care of drug addicted and disabled people), Caritas

## INTERESTS

traveling, ballroom dances, rock climbing, modern art and architecture

## PUBLICATIONS

**Facial Retargeting with Automatic Range of Motion Alignment**, Roger Blanco i Ribera\*, Eduard Zell\*, J. P. Lewis, Junyong Noh, Mario Botsch; *ACM Transaction on Graphics 36(4)/SIGGRAPH, 2017*, (\*equal contribution).

**Differential Effects of Face-Realism and Emotion on Event-Related Brain Potentials and Their Implications for the Uncanny Valley Theory**, Sebastian Schindler\*, Eduard Zell\*, Mario Botsch, Johanna Kissler; *Nature Scientific Reports, 2017, 7, 45003* (\*equal contribution).

**To Stylize or not to Stylize? The Effect of Shape and Material Stylization on the Perception of Computer-Generated Faces**, Eduard Zell, Carlos Aliaga, Adrian Jarabo, Katja Zibrek, Diego Gutierrez, Rachel McDonnell, Mario Botsch; *ACM Transaction on Graphics 34(6)/ SIGGRAPH Asia, 2015*, pp. 184:1-184:12.

**Accurate Face Reconstruction through Anisotropic Fitting and Eye Correction**, Jascha Achenbach, Eduard Zell, Mario Botsch; *Proc. of Vision, Modeling and Visualization, 2015*.

**A Natural Movement Database for Management, Documentation, Visualization, Mining and Modeling of Locomotion Experiments**, Leslie Theunissen, Michael Hertrich, Cord Wiljes, Eduard Zell, Christian Behler, Andre Krause, Holger Bekemeier, Philipp Cimiano, Mario Botsch, Volker Dürr; *Proc. of Living Machines, 2014*, pp. 308-319.

**ElastiFace: Matching and Blending Textured Faces**, Eduard Zell, Mario Botsch; *NPAR '13: Proc. of the Symposium on Non-Photorealistic Animation and Rendering, 2013*, pp. 15-24.

**OctaVis: A Virtual Reality System for Clinical Studies and Rehabilitation**, Eduard Zell, Eugen Dyck, Agnes Kohsik, Philip Grewe, David Flentge, York Winter, Martina Piefke, Mario Botsch; *3rd Place - Dirk Bartz Price for Visual Computing in Medicine (Eurographics Medical Prize), 2013*, pp. 9-12.

**OctaVis: An Easy-to-Use VR-System for Clinical Studies**, Eugen Dyck, Eduard Zell, Agnes Kohsik, Philip Grewe, York Winter, Martina Piefke, Mario Botsch; *Proc. of Virtual Reality Interaction and Physical Simulation (VRIPHYS), 2012*, pp. 127-136.

**Developing Design Guidelines for Characters from Analyzing Empirical Studies on the Uncanny Valley**, Eduard Zell, Mario Botsch; *Proc. of ACM International Symposium on Facial Analysis and Animation, 2012*, pp. 11:1-2.