

Dr. Eduard Zell

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SKILLS	Expert	Intermediate
Programming	C++, OpenGL, OpenCL	CUDA, Python, R, CMake
APIs	Qt, FBX, Eigen	GTest, Mel, Alembic
Software	Maya, Hairfarm, GIMP	Unreal Engine, Houdini, 3ds Max, Nuke
Languages	German, English, Russian	Spanish

EXPERIENCE

since Nov. 2018	Research Fellow (PostDoc) – Ireland , Trinity College Dublin R&D on facial animation, rigging and perception
July 2018 – Oct. 2018	Researcher – Germany , Berlin preparing a grant proposal for a self-funded PostDoc
Sept. 2017 – June 2018	Senior Software Developer – Germany , Trotzkind GmbH, Berlin developed from scratch: <ul style="list-style-type: none">• frame-to-frame mesh registration in volumetric videos• remeshing, mesh repair and other geometry editing algorithms• example-based skinning• FBX and Alembic importer/exporter
Oct. 2010 – Mar. 2018	Assistant Researcher and PhD Student – Germany , CITEC Cluster of Excellence, Bielefeld University <ul style="list-style-type: none">• 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
Oct. 2016 – May 2017	Parental Leave
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 and 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 , Gijón
June 2004	University-entrance diploma – Germany , Rostock

SCHOLARSHIPS

July 2013 – Aug. 2013	DAAD-NRF-Summer Institute Program (stay abroad 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 (stay abroad in Spain)

AWARDS

May 2019	Eurographics PhD Award (Europe’s highest award for computer graphics)
Jan. 2019	Faculty Award for outstanding PhD thesis
Mar. 2015	FameLab NRW (2 nd Place) – worldwide science communication competition
Sept. 2013	Eurographics Medical Prize (3 rd 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

Perception of Virtual Characters, Eduard Zell, Katja Zibrek, Rachel McDonnell; *SIGGRAPH Course 2019*.

The Secret of Appeal - Understanding Perception of Realistic and Stylized Faces, Eduard Zell, *PhD-Thesis, 2018*.

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 Prize 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.

REVIEWER

Symposium on Perception 2019

Eurographics 2018

Symposium on Computer Animation (SCA) 2018