Name: Johannes Sorger
Date of Birth: April 21st, 1983
Nationality: Austrian
Address: Josefstädter Straße 39, 1080 Wien, Austria
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Education

03/2013 – 11/2017: Doctoral program in Engineering and Computer Sciences
Institute of Computer Graphics and Algorithms
TU Wien (Technical University of Vienna)
Dissertation: "Integration Strategies in the Visualization of Multifaceted Spatial Data"
Advisors: Assoc.Prof. Dipl.Ing. Dr.techn. Ivan Viola,
Ao.Univ.Prof. Dipl.Ing. Dr.techn. Eduard Gröller

10/2009 – 03/2013: Master's program in Visual Computing
Specialization: Real Time Graphics and Visualization
TU Wien (Technical University of Vienna)
Master Thesis: "Interactive Graph-Visualization of the Fruit Fly's Neural Circuit"
Advisors: Ao.Univ.Prof. Dipl.Ing. Dr.techn. Eduard Gröller, TU Wien
Dipl.Ing. Dr.techn. Katja Bühler, VRVis Research Company

2003 – 2009: Bachelor's program in Media & Computer Science
Specialization: Design
TU Wien (Technical University of Vienna)
Bachelor Project: "Audio-Visual Perception in Interactive Virtual Environments"
(in collaboration with INRIA, France), Advisor: Matthias Bernhard, PhD

Work Experience

10/2017 – current: Postdoctoral researcher at the Complexity Science Hub Vienna, visualization R&D

01/2016 – 10/2017: Project Assistant at the Institute of Computer Graphics and Algorithms, TU Wien
working on basic and applied research in the fields of illustrative and molecular visualization

10/2012 – 01/2016: Researcher at the VRVis Research Company, working on basic and applied research in the field of visual analytics in spatial and abstract data visualization

02/2011 – 10/2012: Student researcher at the VRVis Research Company, working on biological data visualization in cooperation with the Institute of Molecular Pathology, Vienna

Awards

Best Overall Concept Award 2017, in the BootCamp for Sciencepreneurs, innovation incubation center (i2c), TU Wien

Austrian Computer Graphics Award 2016 for best technical solution (as a team member of the cellVIEW project)

OCG Incentive Award 2014 (OCG Förderpreis 2014), Austrian Computer Society (OCG)

Best Paper Award, at the 3rd IEEE Symposium on Biological Data Visualization (BioVis), Atlanta, Georgia, USA, 2013

Reviewing History

Regular reviewing activity in: TVCG, IEEE VIS, IEEE Access, IEEE VR, EuroVis, CGI, CHI, Pacific Vis

Teaching

Computer Animation (lecture unit on behavioral animation),
supervision of BSc and MSc theses, bachelor projects and seminar works

Selected Publications and Talks

"Immersive Analytics of Large Dynamic Networks via Overview and Detail Navigation"
(with talk at AIVR 2019, San Diego, CA, USA)
Johannes Sorger, Manuela Waldner, Wolfgang Knecht, Alessio Arleo
In 2019 IEEE International Conference on Artificial Intelligence and Virtual Reality (AIVR), San Diego, CA, USA, 2019

"Quantification of the resilience of primary care networks by stress testing the health care system"
Donald Ruggiero Lo Sardo, Stefan Thurner, Johannes Sorger, Georg Duftschmid, Gottfried Endel, and Peter Klimek
In Proceedings of the National Academy of Sciences (PNAS), November 26, 2019 116 (48) 23930-23935

"Sabrina: Modeling and Visualization of Financial Data over Time with Incremental Domain Knowledge"
Alessio Arleo, Christos Tsigkanos, Chao Jia, Roger A. Leite, Ilir Murturi, Manfred Klaffenböck, Schahram Dustdar, Michael Wimmer, Silvia Miksch, Johannes Sorger
In 2019 IEEE Visualization Conference (VIS), Vancouver, BC, Canada, 2019, pp. 51-55

"A Motivation for Visualization Research – Pushing the Boundaries of Performance and Perception"
invited talk (keynote) at the *Data Stories 2018* event hosted by the Central European University, Budapest, February 2018

"Metamorphers: Storytelling Templates For Illustrative Animated Transitions in Molecular Visualization"
(with talk at SCCG 2017, Mikulov, Czech Republic)
Johannes Sorger, Peter Mindek, Peter Rautek, Eduard Gröller, Graham Johnson, Ivan Viola
In 33rd Spring Conference on Computer Graphics (SCCG), pages 27-36. May 2017

"Illustrative Transitions in Molecular Visualization via Forward and Inverse Abstraction Transform"
(with talk at VCBM 2016, Bergen, Norway)
Johannes Sorger, Peter Mindek, Tobias Klein, Graham Johnson, Ivan Viola
In Eurographics Workshop on Visual Computing for Biology and Medicine (VCBM), pages 21-30. September 2016.

"LiteVis: Integrated Visualization for Simulation-Based Decision Support in Lighting Design"
(with talk at VIS 2015, Chicago)
Johannes Sorger, Thomas Ortner, Christian Luksch, Michael Schwärzler, Eduard Gröller, Harald Piringer
In Visualization and Computer Graphics, IEEE Transactions on, 22(1):290-299, January 2016.

"Vis-A-Ware: Integrating Spatial and Non-Spatial Visualization for Visibility-Aware Urban Planning"
Thomas Ortner, Johannes Sorger, Harald Steinlechner, Gerd Hesina, Harald Piringer, Eduard Gröller
In Visualization and Computer Graphics, IEEE Transactions on, 2016.

"Visibility Equalizer: Cutaway Visualization of Mesoscopic Biological Models"
Mathieu LeMuzic, Peter Mindek, Johannes Sorger, Ludovic Autin, David Goodsell, Ivan Viola
In Computer Graphics Forum Volume 35 (2016), Number 3

"A Taxonomy of Integration Techniques for Spatial and Non-Spatial Visualizations"
(with talk at VMV 2015, Aachen)
Johannes Sorger, Thomas Ortner, Harald Piringer, Gerd Hesina, Eduard Gröller
In 20th International Symposium on Vision, Modeling and Visualization (VMV 2015). October 2015.

"*neuroMap - Interactive Graph-Visualization of the Fruit Fly's Neural Circuit*"
(with talk at BioVis 2013, Atlanta - Best Paper Award*)*
Johannes Sorger, Katja Bühler, Florian Schulze, Tianxiao Liu, Barry Dickson
In *Biological Data Visualization (BioVis), 2013 IEEE Symposium on* , pages 73-80. October 2013.

Skills

Research Interests:	Visual Analytics, Information Visualization, and Immersive Analytics – in the domains of bio-medical visualization, geographic information systems, and simulations	
Languages:	German:	first language
	English, French, Spanish:	Berlitz Language Certificate: grade A
	Japanese:	JLPT N5
Techn. Skills:	(applied in 2D, 3D, VR visualization, render engine-, mobile development)	
proficient:	C++, C#, JAVA, JavaScript, LaTeX	
advanced:	OpenGL 1.x – 3.x, ES, GLSL/HLSL (shader programming), Unity3D, three.js, AFrame, Server/client web applications (AJAX), audio & video editing, graphic design (Photoshop, Illustrator), UI/UX development (Qt, GTK), database modeling (SQL)	
familiar:	Image processing (MATLAB), Mobile development (Android 2.x), 3D modeling and animation (Maya)	