

CV

Mag. Dr. Johannes Liem

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<http://digitalcartography.org/>

ORCID: 0000-0001-8696-0245

Main research interests: information visualisation, visual data storytelling, cartography & GIS, spatio-temporal data

Employment History

- Since 03/2021 Research associate in the Department for Arts and Cultural Studies, Danube University Krems; involved in H2020 project InTaVia
- Since 11/2014 Cartography, Data Visualisation, and Programming (Freelance)
Company registered in Austria

Current projects:

(a) D3.js implementation of TileMaps which allow spatial and attributive aggregation of multidimensional data. Collaboration with Aidan Slingsby, giCentre, City University London.

(b) A within-subject study evaluation 3D flow map styles. Using Blender 3D for stimulus generation and Qualtrics/Prolific for conducting the survey. Collaboration with Bernie Jenny, Immersive Analytics Lab, Monash.

(c) Development of APIS, an open source QGIS python plugin facilitating an easy workflow for data management, interpretation, storage, and retrieval of aerial photographs and archaeological sites. Collaboration with Michael Doneus, Department of Prehistory and Historical Archaeology, University of Vienna.

(d) Browser-based wind animation for Mapbox. With periodic automated processing of global weather data (Python, server-side) and visualisation of the wind component as a particle animation (WebGL/Javascript). Customer: dotdotdot.it.

- 10/2015 – 04/2020 Graduate Teaching Assistant, Department of Computer Science, City, University of London, UK
- 02/2013 – 08/2014 Faculty Research Assistant, Cartography and Geovisualisation Group, CEOAS, Oregon State University, USA
- 10/2009 – 01/2013 Student Research Member
Hyperglobe Research Group, Department for Geography and Regional Research, University of Vienna, Austria
- 04/2012 – 06/2012 Research Intern & Teaching Assistant
Cartography and Geovisualisation Group, CEOAS, Oregon State University, USA
- 03/2009 – 02/2012 Teaching Assistant
Department for Geography and Regional Research, University of Vienna, Austria

Education

- 10/2015 – 07/2020 PhD Computer Science, giCentre, Department of Computer Science, City, University of London, UK

Thesis Project: Flowstory - The Efficacy of Storytelling Techniques Applied to the Visualisation of Flow and Movement Data. Using qualitative design space studies and empirical between subjects crowdsourcing studies, I explored how data visualisation and narrative techniques can be brought together.

Examiners: Prof James Cheshire and Dr Ernesto Priego

10/2005 – 11/2012 Diploma Program Geography (Masters level degree), Department of Geography and Regional Research, University of Vienna, Austria

Teaching Experience

Modules: Data Visualisation (Jo Wood), Principles of Data Science (Cagatay Turkey), Visual Analytics (Aidan Slingsby, Natalia and Gennady Andrienko), Introduction to Databases (Cagatay Turkey).

Fellowships & Grants

PhD Scholarship	2015 – 2018, City, University of London, by George Daniels Educational Trust (£60K)
Travel Grants	Digital Humanities 2019, ADHO Bursary by ADHO and The Alan Turing Institute and PhD Travel Grant by City Graduate School.
Performance Scholarships	2010, University of Vienna, Cartography & GIScience 2009, University of Vienna, Geography 2006, University of Vienna, Media Informatics

Prizes & Awards

IEEE Best Poster Award 2018 for GeoBlob project.

A Year in the Life of Earth's CO₂: 2016 Best Map Award by the Journal of Maps; 2016 The Vizzies Visualisation Challenge (Interactive) by US National Science Foundation (NSF); 2015 CaGIS Map Design Competition (Interactive Digital); 2015 Avenza Award for Electronic Mapping – Highly Commended (2nd place) by the British Cartographic Society.

Plan Oblique Europe: 2014 honourable mention Ravenstein-Förderpreis of the German Cartographic Society; 2014 NACIS Student Dynamic Map Competition (Interactive); 2014 FOSS4G Most Unique Map Award & People's Choice Award.

Reviews & Service

Since 2016	Reviewing academic manuscripts for: IEEE VIS (InfoVIS, VAST), EUROVIS, ACM Transactions on Interactive Intelligent Systems, Journal of Maps
09/2016 – 09/2019	Computer Science Research Ethics Committee (PhD representative), Department of Computer Science, City, University of London, UK
Since 2009	Conference Volunteering, EUROVIS 2019 (Porto); IEEE VIS 2018 (Berlin); IEEE VIS 2017 (Phoenix); Geography Day 2009 (Vienna)

Skills

Programming and Scripting

Python, JavaScript, HTML5/CSS, OpenGL/WebGL/three.js, PHP/MySQL, C++, Java

Data Analysis, Data Visualisation

Python (pandas, matplotlib, etc.), R, Tableau, Vega/Vega-Lite, D3.js, Processing/p5js

Survey Tools

Qualtrics (with Prolific and AMT)

Cartography, Design & GIS

Adobe Creative Suite, GDAL/OGR, OpenLayers 3, Leaflet, Mapbox, QGIS (Plugin Development)