

## Christoph Fink

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# Curriculum Vitae

June 2023

## EDUCATION

- 2017-2021 **University of Helsinki, Finland**  
PhD in *Interdisciplinary Environmental Sciences*  
(graduated *with distinction*)
- 2015 **Pontificada Universidad Católica del Ecuador, Quito, Ecuador**  
*Spanish* (no formal degree)
- 2011-2014 **Paris Lodron University Salzburg, Austria**  
doctoral studies in *Applied Geoinformatics*  
(accrued credits transferred to the University of Helsinki 2017)
- 2004-2011 **University of Vienna, Austria**  
MSc in *Geography*, major in *Cartography and Geoinformation*  
(graduated *with distinction*)
- 2008 **Johannes Gutenberg University Mainz, Germany**  
semester abroad

## ACADEMIC AND PRACTICAL EXPERIENCE

- University of Helsinki, Finland**  
2021- postdoctoral researcher, Digital Geography Lab, Horizon 2020 project *URBANAGE*
- 2019-2021 researcher, Helsinki Lab of Interdisciplinary Conservation Science, European Research Council project *Wildtrade*
- 2017-2019 researcher, Digital Geography Lab, Suomen Akatemia project *Investigating illegal wildlife trade*
- University of Vienna, Austria**  
2016-2017 researcher, Department of Social and Cultural Anthropology, FWF project *Configurations of Remoteness*
- Paris Lodron University Salzburg, Austria**  
2011-2014 researcher, Interfaculty Department of Geoinformatics Z\_GIS
- Freytag-Berndt & Artaria, cartographic publishing house, Vienna, Austria**  
2007-2013 map editor, developer for web cartography
- webfreetv.com, Vienna, Austria**  
2002, 2003 software engineer
- occasionally* projects in the fields of data visualisation and cartography, *examples on the following pages*

## TEACHING EXPERIENCE

### University of Helsinki, Finland

- 2022 *Automating GIS processes*  
lecture/practical lab course, course main teacher  
*GEO-Python*  
lecture/practical lab course; course main teacher: Dave Whipp
- 2021, 2019, 2018 *Open GIS and Spatial Data Infrastructure*  
lecture/practical lab course (Moodle); one practical module out of seven; course main teacher Elias Willberg
- 2020 *GIS project work*  
supervising one group, together with Enrico Di Minin; course main teacher: Petteri Muukkonen
- 2019, 2018 *Urban GIS and Visual Tools*  
lecture/practical lab course; guest lecture; course main teachers: Rami Ratvio, Sara Todorovic
- 2018, 2017 *Automating GIS processes*  
practical lab course; one practical module out of seven; course main teachers: Henrikki Tenkanen, Dave Whipp)
- 2018 *Methods for evaluating human preferences*  
lecture/practical lab course; together with Enrico Di Minin (course main teacher), Anna Hausmann, Gonzalo Cortés-Capano, Anna Haukka
- ### University of Vienna, Austria
- 2016, 2017 *Urban Analysis III*  
practical lab course; one out of four modules, together with Michael Holzapfel; main course teacher: Ramon Bauer
- 2013, 2014 *Open GIS and Open Data in Geographic Information Data Handling*  
practical lab course, main course teacher
- 2012 *Webmapping*  
introductory seminar, main course teacher
- ### University of Salzburg, Austria
- 2012 *Geosimulation*  
lecture/practical course, main course teacher
- workshops and seminars taught at EGEA congresses (see honorary activity)**
- 2013 *Okkupy Google Maps! How grass-root activists use geomedia to convey their beliefs*  
EGEA Euromed Regional Congress, El Bosque, Cadiz, Spain
- 2012 *Transport development in polycentric metroregions - the case of Rhine-Ruhr*  
EGEA Western Regional Congress, Hattingen, Germany
- 2010 *4 countries, 1 problem: trans-alpine cargo in the 21<sup>st</sup> century*  
EGEA Western Regional Congress, Steinach am Brenner, Austria
- 2009 *Waterway transport 2.0: Moving goods and ports*  
EGEA Western Regional Congress, Bingen, Germany
- 2008 *Municipalities and the environment: How can the use of GIS ease protection, planning and management?*  
EGEA Eastern Regional Congress, Sinaia, Romania
- 2007 *Practical Usage of Opensource GIS*  
EGEA Annual Congress, Ustroń, Poland

## SUPERVISION EXPERIENCE

- ongoing Eemil Haapponen: **Mapping accessibility – Interactive visualization of travel time matrices (working title).**  
Master's thesis, Master's programme in Geography, study track Geoinformatics, University of Helsinki
- 2023 Eero Perola: **Driving speed deviation from the speed limits – an analysis using floating car data in the Helsinki Metropolitan Area.** Master's thesis, Master's programme in Geography, study track Geoinformatics, University of Helsinki
- 2021 Petteri Muilu: **Remote Sensing of Acid Sulfate Soils using Deep Learning and Aerial LiDAR Data.**  
Master's thesis, Master's Programme in Data Science, University of Helsinki.

## EVALUATION OF THESES

- 2022 Kayleigh C. Kavanagh: **Identifying Intrinsic, Instrumental, and Relational Values in Kumpula, Helsinki. A Participatory Mapping Study.** Master's thesis, Master's programme in Environmental Change and Global Sustainability, University of Helsinki.

## RESEARCH FOCUS

urban transformation, active mobility	volunteered geographic information (VGI)
processes of appropriation of space(s)	big data (e.g., social media)
cities as possibility spaces for political and social participation	machine-learning/artificial intelligence
biodiversity conservation	data visualisation, data science
cartography, cartography as discourse	spatial and spatio-temporal phenomena

## SELECTED PUBLICATIONS

- 2023 Tupasela, Devis Clavijo, Salokannel & Fink: **Older people and the Smart City – developing inclusive practices to protect and serve a vulnerable population.** *Internet Policy Review*.
- 2023 Willberg, Fink & Toivonen: **The 15-minute city for all? – Measuring individual and temporal variations in walking accessibility.** *Transport Geography* 106. DOI: 10.1016/j.jtrangeo.2022.103521
- 2022 O'Hern, Willberg, Fink & Useche: **Relationships among Bicycle Rider Behaviours, Anger, Aggression, and Crashes in Finland.** *Safety* 8(1).
- Sancho-Reinoso, Saxinger, Fink, et al.: **Mapping hierarchies of mobility in the Baikal Amur Mainline region: A quantitative account of needs and expectations relating to railroad usage.** *Polar Geography* 45(3).
- 2021 Fink, Toivonen, Correia & Di Minin: **Mapping the online songbird trade in Indonesia.** *Applied Geography* 134.
- Di Minin & Fink, Hausmann, Kremer, Kulkarni: **How to address data privacy concerns when using social media data in conservation science.** *Conservation Biology* 35(2).
- 2020 Fink, Hausmann & Di Minin: **Online sentiment towards iconic species.** *Biological Conservation* 108289.
- 2019 Toivonen, Heikinheimo, Fink, Hausmann, Hiippala, Järvi, Tenkanen & Di Minin: **Social media data for conservation science: a methodological overview.** *Biological Conservation* 233.
- 2018 Di Minin, Fink, Tenkanen & Hiippala: **Machine learning for tracking illegal wildlife trade on social media.** *Nature Ecology & Evolution* 2(3).
- 2013 Fink & Koch: **Urban Segregation Revisited: incorporating cognitive space representations into agent-based residential models.** In: Koch, A., Mandl, P. (Eds.), *Modelling Social Phenomena in Spatial Context (=Geosimulation Vol. 2)*.
- 2011 Fink: **Mapping together: on collaborative implicit cartographies, their discourses, and space construction.** *meta-carto-semiotics – Journal for Theoretical Cartography* 4.

## SELECTED PROJECTS

- 2018 **POREM.wien** interactive spatio-temporal data visualisation of places of remembrance relating to austro-fascism and national socialism
- 2017 **Weltmuseum Wien: global flow of people** an interactive installation commissioned by the ethnographic museum *Weltmuseum Wien*, for its permanent exhibition 'World in Motion'
- 2016 **austromorph.space** anamorphic maps ('cartograms') on topics of societal, political, and economical relevance
- 2016 **beyondgentrification.com** data-driven, interactive maps visualising the results of a multi-local, multi-paradigmatic research project
- 2015 **wirel-project.at/maps** interactive map showing the religious and ethnic diversity of Vienna

## SELECTED SOFTWARE

- 2022 Python wrapper for the R5 routing analysis engine (*work in progress, leading an international group of researchers*) <https://github.com/r5py/r5py>

- 2021 downloader for complete histories of data and metadata of the microblogging platform Twitter  
pypi.org/project/twitterhistory
- 2019 Python wrapper for the sentiment detection framework *webis*  
pypi.org/project/webis
- 2017 QGIS cartogram plugin  
christophfink.com/blog/cartogram-plugin-for-qgis3

### HONORARY ACTIVITY

- 2020- trainer, bicycle courses for adult learners, Helsingin Polkupyöräilijät/Pyöräliitto
- 2005-2014 member of the European Geography Association for Students and Young Geographers (EGEA),  
workshop leader, congress organiser, editor of congress proceedings
- 2007-2009 student spokesperson on the board of the German Society for Geography (DGfG)

### PRIZES, AWARDS, AND GRANTS

- 2023 Marie Skłodowska-Curie Action Postdoctoral Fellowship, with Dr Sanderien Verstappen, University of Vienna
- 2019 1<sup>st</sup> price in the Map Awards (category Digital Products) of the International Cartographic Conference, Tokyo, Japan  
for the interactive data visualisation project Politics of Remembrance (POREM.wien)
- 2016 member of the winning team, Copernicus Earth Observation Data Hackathon, Vienna, Austria

### LANGUAGES

German (mother tongue)	English (full professional proficiency)	Finnish (beginner, CEFR level B1)
	Spanish (fluent)	French (beginner, CEFR level A2)

### COMPUTER SKILLS

**programming, script and markup languages:** Python, Bash, R, Javascript/ES6, PHP, Perl, C, C++, Java

**data analysis and visualisation:** Pandas, GeoPandas, Numpy/SciPy, R, Tableau, NLTK, Spacy, matplotlib, seaborn, ggplot, Inkscape, Adobe Creative Suite, Blender, d3js

**geographic information systems, cartography:** QGIS, GDAL/OGR, ESRI ArcGIS, Grass GIS, PostGIS, GeoPandas, UMN MapServer, OpenLayers, Leaflet, GeoServer

**database systems:** PostgreSQL/PostGIS, MySQL/MariaDB, SQLite, CouchDB, MongoDB, LDAP, Oracle

**systems administration:** systemd/SysVinit (e.g., GNU/Linux, FreeBSD), Apple MacOS, Microsoft Windows

### REFERENCES

Professor Tuuli Toivonen, Department of Geosciences and Geography, University of Helsinki, tuuli.toivonen@helsinki.fi

Professor Alois Humer, Department of Geography and Regional Research, University of Vienna, alois.humer@univie.ac.at

Dr Gertrude Saxinger, Department of Political Science, University of Vienna, gertrude.saxinger@univie.ac.at  
Institute of Social Anthropology, University of Bern, gertrude.saxinger@anthro.unibe.ch

Ramon Bauer, City of Vienna, ramon.bauer@wien.gv.at