STATE OF THE MAP



Bridging the Map Heidelberg 2019

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Android app



Calendar file



The general emergency telephone number in Germany is **112**.

Welcome to Heidelberg and State of the Map 2019

This booklet provides you essential information about the conference, the location and the schedule. We are proud of the participation of the OpenStreetMap community and our rich programme but there is even more! Please do get involved and take advantage of the off-schedule sessions, discussions and spaces.

Welcome desk It is located on the ground floor of the Chemie-Hörsaalgebäude (Chemistry Lecture Halls Building). You can announce lightning talks and self-organised sessions there.

Self-organised sessions Some rooms in the Mathematikon building are available for self-organised sessions on Saturday and Sunday. Please come to the welcome desk in the Chemie-Hörsaalgebäude to announce your session.

Abbreviations The following abbreviations are used for rooms and buildings:

GHS: Großer Hörsaal (Large Lecture Room) KHS: Kleiner Hörsaal (Small Lecture Room) HSW: Hörsaal West (West Lecture Room) HSO: Hörsaal Ost (East Lecture Room)

Math.: Mathematikon

Footnotes The following footnotes are used in the booklet:

♦ The title is not provided at full length in the schedule table.

This session/room will not be recorded on video.

					Kleiner Hörsaal 💘	Workshop Mapping Pub- lic Transport and Cycling Itineraries Using JOSM's PT_Assistant Plugin	
Großer Hörsaal		Participation	Participation		Break	Hörsaal West	Introduction to OpenStreetMap: How It Is Made and How It Is Used Thomas Skowron, Frederik Ramm
	Welcome Kevnote Open up! Why Digital Mobility Needs Participation	hy Digital Mobility Need mar Seifert	y Digital Mobility Needs nar Seifert		b)	Hörsaal Ost	Data Quality and Feature Extrac- tion at Scale with RoboSat.pink Oliver Courtin Human Mapping with Machine Data Christopher Beddow, Edoardo Neerhut
		Keynote Open up! Why Digital I Christian Förster, Dietmar Seifert	Keynote Karen Sandler		Großer Hörsaal	Get to know OSGeo and how OSGeo is Connected to OSM Astrid Emde "Keepin' It Fresh (and Good)!" Kevin Ventullo, Christopher Klaiber	
	08:30	10:00	10:30	11:00		11:30	

Kleiner Hörsaal 💘			Workshop How to Contribute to WeeklyOSM via	the CMS: OSMBC Manfred Reiter	
Hörsaal West		Lunch	Share Edits and Insights with the Overpass Tools	Roland Olbricht	
Hörsaal Ost	Assisted Intelligence – How We Map with the Support of New Technologies F. Delattre, S. Singh	→	Lightning Talks I	OsmInEdit – a Simple Indoor Editor Adrien Pavie et al.	Observe - Offline, Cross-Platform Field Mapping Tool for OpenStreetMap
Großer Hörsaal	Driving South East Asia Forward with OpenStreetMap Jinal Foflia		ODbL Licence Compatibility Kathleen Lu	Communication and Knowledge Transfer in OSM Hanna Krüger	Past and Fu- ture of the OSMF Membership Work- ing Group
	12:30	13:00	14:00	14:30	15:00

Saturday

	Großer Hörsaal	Hörsaal Ost	Hörsaal West	Kleiner Hörsaal 💘
15:30	j	Photo (courtyard of	Photo (courtyard of Mathematikon building)	
16:00		<u></u>)	Break	
16:30	OSM Data: From Digital to Physical Design Yantisa Akhadi	Lightning Talks II	OSMF Board and Working Groups Meeting (public)	Workshop uMap for Newbies Manfred Reiter
17:00	CycloSM, a Bicycle Oriented Render for every Cyclist Lucas Verney, Flori- mond Berthoux	VR Map: Using OSM Data in a WebVR Environment Robert Kaiser		
17:30	How to Use OSM Data with the Desk- top GIS QGIS Astrid Emde	Hikar – OSM Aug- mented Reality for Walkers across Europe		

Social Event at HebelHalle

Location

entrance from Gottliebgeo:49.39655,8.67945 69115 Heidelberg Hebelstraße 9 HebelHalle



next tram stop: Rudolf-Diesel-Straße Getting there by public transport

Daimler-Straße

tram line 26, bus line 33

Programme

Welcome

OSM Awards ceremony Dinner and music

catering company employing refugees from Catering is provide by Sindbad, a local

Tabbouleh salad with fried shrimps

Couscous salad with fried vegetables and herbs

Baguette with hummus and sprouts and dried tomatoes

reduction, soft goats cheese, ham and bread Fresh figs and prickly pears with balsamic

Stewed beef in orange, cocos and fresh coriander sauce, rice Syrian dal from lentils with lime, spices, fresh herbs, cocos milk and pumpkin topping, rice

The menu might be subject of change. Desserts

	Mapping	KHS	Scholar Lightning Talks		
Hörsaal West	Bridging the Map? Exploring Interactions between the Academic and Mapping Communities in OSM A. Yair Grinberger et al.	Hörsaal West	OpenStreetMap as a Space me Dipto Sarkar, So Hoi Kay	Analysis of OSM Data through OSM Notes User Posting Toshikazu Seto et al.	A Novel Application of Models of Species Abundance to Better Understand OSM Community Structure and Interactions P. Mooney
Hörsaa	Bridging the Map? Exploring Interactions betu Communities in OSM A. Yair Grinberger et al.	Hörsaal Ost	"Mapathon, Map- athon, Mapathon!" Séverin Menard, Nicolas Chavent	Associations Dy- namics in French Speaking Africa [♦] Séverin Menard, Nicolas Chavent	Tales from the Tasking Manager <i>Ramya Ragupathy et al.</i>
	Bridging the Map? E Communities in OSI	Großer Hörsaal	Flexible Rout- ing with Graph- Hopper Peter Karich	Imagery Solutions in OSM Kevin Bullock	Lightning Talks III
	00:60		09:30	10:00	10:30

Math. C		Workshop First steps with OSM Editors Angjelina	Dervishaj	
KHS 📜		Bilingual Breakout Session Séverin Menard,	Nicolas Chavent	
Hörsaal West	Break	Towards Scalable Geospatial Remote Sensing for Efficient OSM Labeling ™ Rui Zhang et al.	Estimating Latent Energy Demand of Buildings Nikola Milojevic- Dupont et al.	Client-Side Route Planning: Prepro- cessing the OSM Road Network for Routable Tiles Harm Delva et al.
Hörsaal Ost		Our Falkirk – Mitigating the Impacts of Poverty [♦]	Metrics to Monitor Buildings Outbounds Pierre Béland	Integrat- ing Quality Assurance Checks into Map Editors ♦ David Manzer et al.
Großer Hörsaal		Overview of Map Serving Architectures Paul Norman	Customis- ing Search for Special- Interest Maps S. Hoffmann	Is Your OSM App Spying on You? Thomas Skowron
	11:00	11:30	12:00	12:30

Math. C 💘		Workshop Using OSMCha to Under- stand Bad Edits Andrey Golovin et al.	
KHS		Diversity and Inclusion in OSM Patricia Solis et al.	
Hörsaal West	∳ Lunch	Intrinsic Assessment of Contribution Patterns through Exploratory Spatial Data Analysis Marco Minghini et al.	Corporate Editors in the Evolving Landscape of OSM: A Close Investigation of the Impact to the Map and Community Jennings Anderson et al.
Hörsaal Ost		Spatial Indexes for OSM in PostGIS	Lightning Talks IV
Großer Hörsaal		What's behind JoSM? Vincent Privat	Mapping Solar Panels Can Save Megatons of CO ₂ Dan Stowell, Jerry Clough
	13:00	14:00	14:30

Math. C	bookable space	bookable space	
KHS	Nomad Maps, an Andean Car- tographic Itinerancy by Bike (Video) Alban Vivert		
Hörsaal West	Exploring the Effects of Poké- mon Go Vandalism on OSM Levente Juhász et al.	Analysing the Spatio-Temporal Patterns and Impacts of Large-Scale Data Production Events in OSM A. Yair Grinberger et al.	B reak
Hörsaal Ost	OSM Data Pro- cessing with PostgreSQL/ PostGIS Jochen Topf		
Großer Hörsaal	National Trust – Managing a Path Inven- tory in OSM: To- wards an Open Paths Standard in OSM for the UK	Collaborative Mapping of Cy- cling Infrastruc- ture for Route and Thematic Maps \times Carolina Ortega Espinosa	
	15:00	15:30	16:00

Math. C	Workshop JOSM Turn Restriction: Improving Data Quality	hardhika Machmud	
KHS	Updating our Attri- bution Guidelines Simon Poole	Local Chapters Congress Joost Schouppe	
Hörsaal West	Development after Displacement: Using OSM Data to Measure SDG Indicators at Informal Settlements Hannah Friedrich et al.	Analysis of OSM Data Quality at Different Stages of a Participa- tory Mapping Process: Evidence from Infor- mal Urban Settings Godwin Yebodh et al.	Assessing the Completeness of Urban Green Spaces in OSM Christing Ludwig et al.
Hörsaal Ost	Mapper's Privacy Roland Olbricht	Teams for OSM <i>Marc Farra</i>	Lightning Talks V
Großer Hörsaal	Notes: Can We Do Better. Experiences and Ideas from the Frontline	Is the OSM Data Model Creaking? Martin Lucas-Smith	Broken Promises and Technical Difficulties Ilya Zverv
	16:30	17:00	17:30

Poster Session at Mathematikon

18:00

We invite you to join the poster session with the exhibition of posters accepted by the academic programme committee and the submissions of the open poster competition.

Drinks, some food and our special State of the Map 2019 beer will be provided.

Location

Mathematikon Klaus-Tschira-Platz 69120 Heidelberg geo:49.4172,8.6755 entrance from the south, ground floor





Mathematikon C 💘	Workshop OpenStreetMap and Wikidata: Awesome Together	Eugene Alvin Villar		
Kleiner Hörsaal 💘	The Next Generation of Mappers: Learning from YouthMappers	Jessica Bergmann	OpenStreetMap in Croatia Hrvoje Bogner	Break
Hörsaal Ost	OSM2World: 3D OSM in Your Browser Tobias Knerr	OpenDatathon Activities in Japan Shinji Enoki	Lightning Talks IV	
Großer Hörsaal	Qwant Maps: Geocode the World with OSM Data Guillaume et al.	Routing for Humans Sebastian Ritter- busch	Mapping Mobility in Stockport Sam Milson	
	09:30	10:00	10:30	11:00

*	,			
Mathematikon C ⊯	Workshop Custom Presets Creation Using JOSM Harry Mahardhika	Масһтид		
Kleiner Hörsaal 💘		Software Available on osm.org Roland Olbricht		Lunch
Hörsaal Ost	Integrating and Validating Open Data in OSM Using Street Pictures Andrien Pavie	Introduce Open- PlaceReviews and Connect to OSM Victor Shcherb	Lightning Talks VII	==
Großer Hörsaal	Caretography – Mapping Difficult Issues with Open- StreetMap during Difficult Times	David Garcia, Martin Dittus	Access to Prosperity: Quantifying Infrastructure Impact with OSM Davey Lovin	
	11:30	12:00	12:30	13:00

Mathematikon C ™	Workshop ImproveOSM – MissingRoads Workshop Beata Tautan-	Jancso, Dumitru Laura			
Kleiner Hörsaal 💘	Participatory Mapping for Open Counties Zacharia Muindi		State of the Map Bangladesh: Trans- forming a Resilient Community by In- stitutionalising ⋄ Tasauf A Baki Billah	Break	
Hörsaal Ost	Norway: Successful Deployment of OSM in Public Transport	Public Transport Navigation Using OSM by OsmAnd Victor Shcherb, Eugene Kizevich	OSM Vector Tiles in Custom Coordinate Systems Jiri Komarek		
Großer Hörsaal	Pedestrian Routing in Complex Areas: the Case of Paris Railway Stations Antoine Riche	Automatically Annotate a Pedes- trian Route with OSM Landmarks Frédéric Rodrigo	From Car Routing to Train Routing Denis Cheynet		Closing
	14:00	14:30	15:00	15:30	16:00

The OpenStreetMap Foundation is the international non-profit organisation supporting, but not controlling, OpenStreetMap. We are dedicated to encouraging the growth, development and distribution of free geospatial data and to providing geospatial data for anyone to use and share.

OF.

OpenStreetMap Foundation

shape the direction of the Foundation, and support efforts of working groups. We welcome all who We need you as member. Members are vital to the OpenStreetMap Foundation–to voice ideas and support our goals to join us!

Find out more and join at osmfoundation.org or join our sessions:

- Saturday 14:00, Großer Hörsaal: ODbL licence compatiblity
- Saturday 15:00, Großer Hörsaal: Past and Future of the OSMF Membership Working Group
 - Saturday 16:30, Hörsaal West: Board and working groups meeting
 Sunday 16:30, Kleiner Hörsaal: Updating our attribution guidelines
 - . Sunday 15:30, Memer Horsaat: Opdating od attition
- · Sunday 17:00, Kleiner Hörsaal: Local chapter congress



Video recording and streaming is provided by the volunteers of CCC Video Operation Centre. The videos will be published at https://media.ccc.de/under a free and open licence

Saturday Session Descriptions

Opening

Großer Hörsaal, 09:30

Dietmar Seifert, Christian Förster

10:00

Großer Hörsaal

Keynote Open up! Why Digital Mobility Needs Participation

Baden-Württemberg's Ministry of Transport aims at developing regional mobility data towards an open and interoperable framework for new mobility solutions – as part of a sustainable traffic system, realising efficiency, climate protection and living quality. On the way there, fair chances for innovation are key: Not only for better results but also for the involvement of most different societal actors. Cross-thinking and open innovation are cornerstones in such a process.

Karen M. Sandler

10:30

Kevnote

Großer Hörsaal

Karen M. Sandler is the executive director of the Software Freedom Conservancy, which is the non-profit home of dozens of free and open-source software projects including Git, Etherpad, QEMU, Selenium and Inkscape (to name but a few). She is known as a cyborg lawyer for her advocacy for free software as a life-or-death issue, particularly in relation to the software on medical devices.

She co-organises Outreachy, the award-winning outreach programme for people who are subject to systemic bias and underrepresented in tech. Karen is an adjunct Lecturer-In-Law at Columbia Law School and a Visiting Scholar at UC Santa Cruz. She is the recipient of the Free Software Foundation's 2017 Award for the Advancement of Free Software as well as an O'Reilly Open Source Award.

Astrid Emde 11:30

Get to Know OSGeo and How OSGeo Is Connected to OpenStreetMap

Großer Hörsaal

Open Source Software and Open Education Making Use of OpenStreetMap Data

OSGeo is all about open-source software, open data and open education. Learn about OSGeo and what builds up this great organisation and find out how OpenStreetMap is used by OSGeo projects, how OpenStreetMap can use OSGeo projects and how the two OSGeo and OpenStreetMap are connected.

Olivier Courtin (DataPink)

11:30

Data Quality and Feature Extraction at Scale with RoboSat.pink

Hörsaal Ost

How to use plain open data and imagery to train an accurate deep learning model, able to detect inconsistencies in an OpenStreetMap dataset, to spot it and to extract features. And make it work at scale, with an open-source solution named RoboSat.pink.

Thomas Skowron, Frederik Ramm

11:30

Introduction to OpenStreetMap How It Is Made and How It Is Used

Hörsaal West

This session provides an entertaining yet informative introduction into everything you need to know about OpenStreetMap.

Polyglot 11:30

Mapping Public Transport and Cycling Itineraries Using JOSM's PT_Assistant Plugin in

Kleiner Hörsaal

The PT_Assistant plugin has been developed over the past 3 summers as a Google Summer of Code project and will probably see further development this summer. During this workshop, learn how PT_Assistant can map itineraries for public transport, cycling and hiking. Bring a computer with Java installed on it to take part interactively.

Christopher Klaiber (Facebook), Kevin Ventullo 12:00 (Facebook) Großer Hörsaal

"Keepin' It Fresh (and Good)!"

Continuous Ingestion of OpenStreetMap Data at Facebook

Building forward from our work on Mobius Logical Changesets (presented last year at State of the Map US 2018), we have created an automated ingestion framework for OSM data that allows us to selectively update parts of the map instead of doing a full snapshot change.

Christopher Beddow (Mapillary), Edoardo Neerhut 12:00 (Mapillary) Hörsaal Ost

Human Mapping with Machine Data

How useful are map features automatically extracted from street-level images? Can they be trusted? These are some of the questions we tried to answer through community campaigns and student-led research in 2019. We will share some of these lessons and elicit a broader discussion on the methods that can be used to turn automatically extracted features into useful OpenStreetMap data.

Jinal Foflia (Grab)

Driving South East Asia Forward with OpenStreetMap

Großer Hörsaal

12:30

It's been more than a year since we at Grab incorporated OpenStreetMap into our ecosystem and we have come a long way since then. This talk will focus on our learning journey, our tools, the challenges and our experiences working in the South East Asia region and the vibrant OpenStreetMap communities here.

Felix Delattre (HOT), Surabhi Singh (Microsoft/HOT)

12:30

Assisted Intelligence - How We Map with the Support of New Technologies

Hörsaal Ost

Deep learning methods for feature extraction using computer vision are giving concrete results. This talk provides an overview of feature detection from satellite imagery and how machine learning can provide a seamless mapping experience for mappers, allowing them to utilise their knowledge to enrich maps further.

Kathleen Lu (LWG) 14.30

Open Database License Compatibility

Großer Hörsaal

Have you ever wondered if a certain dataset can be used for OSM? What does it mean for a licence to be "compatible" with OSM and Open Database License? This talk will give pointers on where to look for information. common compatibility issues, and best practices for presenting a licence to the Licensing Working Group (LWG) for help review.

Lightning Talks I

Hörsaal Ost, 14:30

The following lightning talks will be presented in this session:

- S M Sawan Shariar (YouthMappers Dhaka College): Uses of native language in OSM
- OpenDEM: SolidaryCityMap
- Seán Lynch (OpenLitterMap): OpenLitterMap open data on plastic pollution with blockchain rewards (Littercoin)
- Janet Chapman (Crowd2Map Tanzania): Map2endFGM

Roland Olbricht 14:30

Share Edits and Insights with the **Overpass Tools**

Hörsaal West

Not every data item in OpenStreetMap can have an immediate impact on the rendered map. But you can make every data item visible on a map and share the links or share the data, no matter how much the item is special interest. This is the purpose of Overpass API and Overpass Turbo. Manfred Reiter 14:30

How to Contribute to WeeklyOSM via the CMS - OSMBC in ■

Kleiner Hörsaal

The OSM Community Should Know about It ...

Transfer in OpenStreetMap

OSMBC is the Content Management System to produce weeklyOSM in recently nine languages.

Hanna Krüger 15:00

Communication and Knowledge Großer Hörsaal

The OpenStreetMap project uses many different technologies and channels for communication and documentation. This talk is an overview of various communication platforms and their relevance and reach at local and international level. In addition, the advantages and disadvantages of the current strategy for communication and knowledge transfer will be discussed.

Thomas Sontag, Andreas Dirks, Hannes Geißelmann, 15:00 Adrien Pavie Hörsaal Ost

OsmInEdit, a Simple Indoor Editor

The Indoor Map Creator is an easy-to-use open-source map editor for OpenStreetMap indoor data. It is web-based with an intuitive user interface to make mapping indoors accessible and easy for everyone. Check it out and enjoy mapping buildings!

Michael Spreng (Membership Working Group)

15:30

Past and Future of the OSMF Membership Working Group

Großer Hörsaal

What is an OSMF working group? What does the membership working group in particular do? And how can you improve the experience of an OSMF membership?

Sajjad Anwar

15:30 Hörsaal Ost

Observe - Offline, Cross-Platform Field Mapping Tool for OpenStreetMap

Over the last few months, we've been building an offline-first field mapping tool for the OpenStreetMap ecosystem called Observe. Observe makes field surveying and verification easy for mappers, and works on iOS and Android. My talk will cover how Observe integrates with mapping workflows and helps improve OpenStreetMap data from the field. I'll also touch upon fundamentals of building Observe and our assumptions on field mapping.

Yantisa Akhadi (HOT)

16:30

OSM Data: From Digital to Physical Design

Großer Hörsaal

Exploring the visualisation of OSM data outside its digital form and how it can be applied to everyday objects from book covers to wallpaper. This talk will discuss how to elevate OSM data beyond maps, exploring its potential in data-as-decor in both public and private space. The talk will describe the tools and workflow used to create these products as well as its strengths and weaknesses.

Lightning Talks II

Hörsaal Ost, 16:30

The following lightning talks will be presented in this session:

- Marco Minghini, Francesco Frassinelli: OpenStreetMap intrinsic quality assessment using Is OSM up-to-date? web application
- Christopher Beddow (Mapillary): Deriviste click and go photo mapping
- Minh Nguyễn: Fifty states in 12 years and five minutes
- Andi Tabinas, Arnalie Vicario: "MAPAbabae": Using OSM as a tool for mapping with women and for women
- Ilya Zverev: Reverse geocoding is not simple

Joost Schouppe (OSMF)

16:30

OSMF Board and Working Groups Meeting

Hörsaal West

Get to know the Board and the Working Groups. Together, we run the OSMF. Let's use the SotM to have a real face-to-face meeting. The public is invited to join the conversation too.

Manfred Reiter

16:30

uMap for Newbies

Kleiner Hörsaal

We create an individualised map based on OSM using uMap.

Florimond Berthoux, Lucas Verney

17:00

CyclOSM, a Bicycle Oriented Render for Großer Hörsaal every Cyclist

CyclOSM is a new cycling render. It is free and aims at rendering new bicycle-specific features, in order to take into account the diversity of cycling practices.

Robert Kaiser (Mozilla)

17:00 Hörsaal Ost

VR Map: Using OSM Data in a WebVR Environment

Simple GeoData Visualisation with A-Frame

Can you actually walk through or fly over a 3D scene of live OSM data using a VR headset? – and if so, can this be done in a way that easily transforms to a view on a normal computer (or mobile) screen? The answers are "Yes" and "Yes", and this talk will show how this can be done with relatively simple code, and all inside a web browser!

Astrid Emde (OSGeo)

17:30

How to Use OpenStreetMap Data with the Desktop GIS QGIS

Großer Hörsaal

Get to Know the Great Combination of OSM Data and QGIS

The desktop GIS QGIS offers many ways to work with OSM data. This presentation will give an overview on how you can use OSM data with OGIS.

Nick Whitelegg (Solent University)

17:30

Hikar - OSM Augmented Reality for Walkers across Europe

Hörsaal Ost

Hikar is an OSM-based augmented reality navigation app for walkers and hikers, showing OSM ways overlaid on the camera feed of the device and, in the latest version, virtual signposts pointing the way to nearby points of interest. This technical talk will introduce Hikar, detail the many new developments since it was last presented at SotM Birmingham 2013, and describe how it works in technical detail.

Social Event

Hebelhalle, 19:00

See page 7 for details about the social event.

Sunday Session Descriptions

A. Yair Grinberger (Heidelberg University), Marco Minghini (European Commission, Joint Research Centre), Levente Juhász (Florida International University), Peter Mooney (Maynooth University), Godwin Yeboah (University of Warwick) 09:00 Hörsaal West

Bridging the Map? Exploring Interactions between the Academic and Mapping Communities in OpenStreetMap

This talk presents an initial inquiry into the relations between the academic and mapping communities in OpenStreetMap, based on a review of recent publications, interviews of colleagues, and self-reflection of the authors. By this, we aim to understand how and when research-community interactions come to be, what is their nature, and how these can be improved and made more productive for both sides.

Peter Karich (GraphHopper GmbH)

09:30

Flexible Routing with GraphHopper

Großer Hörsaal

In this talk we give an overview on how to use GraphHopper to provide more flexible routing (based on weather information, road class, road width etc.) and how this could be also used for visualisation purposes or data analysis.

Nicolas Chavent, Séverin Menard (LLG/ProjetEOF)

09:30

"Mapathon, Mapathon, Mapathon!"

Hörsaal Ost

Who benefits from mapathons? Between (over)communication and (over)-attribution, critical feedback on the inflation of a form of action oversold in the field of humanitarian action and development aid. Do they really benefit OSM?

Dipto Sarkar (National University of Singapore), So Hoi Kay (ibid.) 09:30 Hörsaal West

OpenStreetMap as a Space in

Can OSM be used in classroom teaching as a definitive instance of a geographic space? We provide instances of how OSM as space may be of interest to researchers and for students of geography alike. Concepts of human geography manifested in OSM can be used to understand how digital geographies and offline activities are intrinsically interwoven with and influenced by each other. Thus, introduction to digital geography in classrooms can be through concepts in human geography.

Scholar Lightning Talks in

Kleiner Hörsaal, 09:30

The following lightning talks will be presented in this session:

- Jen Alconis Ayco: Mapping Advocacy: Breastfeeding stations in the Philippines
- Pradip Khatiwada (Youth Innovation Lab): Open data for disaster governance in Nepal
- Tshedy Letsie: MapLesotho
- Naveen Francis: State of the Map India
- Jariatou Jallow (Connected YouthMappers): OSM for Gambia (mapping the whole Gambia)
- Emmor Nile: HOT and OSM in Tanzania, the ups and downs of crowdsourced mapping
- Fernando Castro T (Fundación OSM Colombia): Community cartographers
- Dinnah Feye H. Andal: Using OpenStreetMap building footprints data for population distribution model: a case study in Cavite, Philippines
- Porfirio Carrasco: Public transport in OSM
- Matthijs Melissen: Rendering order in openstreetmap-carto

Satellite imagery has materially enhanced OpenStreetMap and improved editing and validation. In this talk we present recent enhancements we have made to get even more information from satellite imagery.

Séverin Menard, Nicolas Chavent (LLG/ProjetEOF)

10:00

OSMF Local Chapters in Countries of the Global South

Hörsaal Ost

What Can We Learn from OSM associations Dynamics in French Speaking Southern Countries of Africa and the Caribbean?

This talk will share lessons that OSM and OSMF members can learn about the multi-year collective dynamics around OpenStreetMap which unfold in French-speaking southern countries of Africa and the Caribbean with the view to identifying paths for local OSM grassroots groups' evolution toward becoming formal OSMF Local Chapters.

Toshikazu Seto (University of Tokyo), Hiroshi Kanasugi, (ibid.), Yuichiro Nishimura (Nara Women's University)

10:00 Hörsaal West

Analysis of OSM Data through OSM Notes User Posting

In this research, the OSM Notes feature is mainly viewed as data that can be examined speedily from global OSM data in terms of the content of the notes posted and the location of users.

Sunday

Lightning Talks III

Großer Hörsaal, 10:30

The following lightning talks will be presented in this session:

- Katrin Humal (Mapillary): Human in the Loop: Verifying machinegenerated data for better maps
- · Ilya Zverev (Juno Lab): Share the word
- Beata Tautan-Jancso (Telenav): Enhancing OSM with missing roads
- Sibabrata Choudhury (Envision): Community-led mapping helping in policy changes
- Alina Negreanu: How to create a data annotation process used for navigation

Ramya Ragupathy (HOT), Wille Marcel Lima Malheiro, Felix Delattre (HOT)

10:30 Hörsaal Ost

Tales from the Tasking Manager

The Tasking Manager is OpenStreetMap's most used software tool to organise mapathons, community mapping initiatives, and professional mapping teams. Over the last year it has been developed further significantly. This talk will give an update on the newest developments and the emerging community around the application.

Peter Mooney (Maynooth University)

10:30

A Novel Application of Models of Species Abundance to Better Understand OSM Community Structure and Interactions

Hörsaal West

The OSM community is a global community crossing cultures, languages, and geographical boundaries. Researchers have been working to develop automated approaches to understanding the composition of this com-

munity through their contributions to the OSM database. In this talk we propose a new and novel application of theories and models of species abundance from ecological science to understand contributor community structure and distributions in OSM.

Paul Norman 11:30

Overview of Map Serving Architectures Großer Hörsaal

Serving maps is one of the most common uses of OpenStreetMap data. This talk goes over the component-level architecture for common and uncommon ways to serve maps.

Alison Moon (thinkWhere)

11:30

"Our Falkirk"

Hörsaal Ost

Mitigating the Impacts of Poverty using OSM Data Themes

Services that provide money advice, access to food provision, digital access, and community support are key to supporting people facing poverty. "Our Falkirk" is a simple mapping platform for service discovery that allows enriched OSM data to be easily described, mapped and shared through the concept of data 'themes'.

Rui Zhang (IBM Research), Marcus Freitag (ibid.), Conrad 11:30 Albrecht (ibid.), Siyuan Lu (ibid.), Wei Zhang (ibid.) Hörsaal West

Towards Scalable Geospatial Remote Sensing for Efficient OSM Labeling

The time OpenStreetMap mappers invest in labeling the world is valuable. We present how methods from remote sensing, big data distributed computing, and artificial intelligence can be combined to support human analysis of geo-spatial data.

Bilingual Breakout Session

Kleiner Hörsaal

This session will present the rise of active, self-standing grassroots communities in Haiti, Western and Central Africa since 2010 resulting from a unique set of continued support actions replicable in other territories, by an ensemble of speakers.

The following people will speak during this session:

- Nicolas Chavent (France)
- Séverin Ménard (France)
- · Amadou Ndong (Senegal)
- Aimée Sama (Togo)
- Innocent Dibloni (Burkina Faso)
- · Saliou Abdou (Benin)
- · Racky Ly (Ivory Coast)

Angjelina Dervishaj

11:30

First Steps with OSM Editors in

Mathematikon C

During this session I will share some tips and tools for newcomers to start making their first edits on OpenStreetMap. I will do so by explaining the mapping concepts, process, the use of editors, and will continue with the practicing part. By explaining this process, I aim to make it easier for new contributors to get started with editing and will show some everyday examples to illustrate the importance of even the smallest contributions.

Sarah Hoffmann

12:00

Customising Search for Special-Interest Großer Hörsaal **Maps**

This talk discusses different ways how to improve the search experience for domain-specific maps.

Pierre Béland 12:00

OSM Quality Mapping: Metrics to Monitor Buildings Outbounds

Hörsaal Ost

How Can We Better Monitor and Correct Quality Problems?

Mapathons and imports present a quality challenge for the OSM community. This presentation focuses on buildings. It presents metrics and shows progress of tool development to monitor and correct quality problems in the OSM database or before importing.

Nikola Milojevic-Dupont (Mercator Research Institute on Global Commons and Climate Change), Peter-Paul Hörsaal West Pichler (Potsdam Institute for Climate Impact Research), Lynn H. Kaack (ETH Zurich), Steffen Lohrey (Technische Universität Berlin), Felix Creutzig (Mercator Research Institute on Global Commons and Climate Change)

Estimating Latent Energy Demand of Buildings

We propose a model that uses only open data for estimating the minimal energy use of individual buildings for heating and cooling at scale. The workflow is divided in two main blocks: (i) predicting at scale a 3D building stock using OpenStreetMap data, and (ii) estimating the energy use of buildings individually with a back-end model.

Thomas Skowron 12:30

Is Your OSM App Spying on You?

Großer Hörsaal

OpenStreetMap enables people to use third-party apps that seem to be more suitable for privacy-conscientious users, but are we as users really private when using OSM-based apps?

David Manzer, Matthew Gibb (Radiant Solutions), Clarisse Abalos (Radiant Solutions) Hörs

12:30 Hörsaal Ost

Bringing Validation to Users: Integrating Quality Assurance Checks into Map Editors

Providing more validation checks with MapRules and MapCSS tag checks in ID and JOSM to direct mappers to issues as they map. As well as using Overpass queries to retrieve features with data quality issues.

Harm Delva (Ghent University), Julián Rojas (ibid.), Ben Abelshausen (Open Knowledge Belgium), Pieter Colpaert (Ghent University), Ruben Verborgh (ibid.) 12:30 Hörsaal West

Client-Side Route Planning: Preprocessing the OpenStreetMap Road Network for Routable Tiles

Travellers have high expectations of their route planners. We explore how preprocessing techniques applied to linked open data derived from OSM (Routable Tiles) can provide satisfying performance for client-side route planning.

Vincent Privat

14:00

What's behind JOSM?

Großer Hörsaal

Presentation of the JOSM Development Model: How Is It Made? By Whom? How Can I Help?

JOSM is almost as old as OSM but few people really know what it takes to maintain your preferred editor.

We will present the development model of JOSM and who is part of its active community: developers, translators; testers; plugin authors; end users; sponsors; etc.

We will talk about project difficulties, the major achievements made in the past years, what work is currently in progress, and what will happen in the near future!

Felix Kunde 14:00

Spatial Indexes for OSM in PostGIS

Hörsaal Ost

Indexing OpenStreetMap data in your PostGIS database for fast spatial queries is not as straightforward as one might hope. And with each release of PostgreSQL/PostGIS there are more options to try. This talk will explain different spatial indexing concepts and best practices in PostGIS and present some benchmarking results.

Marco Minghini (European Commission, Joint Research Centre), Daniele Oxoli (Politecnico di Milano), Hörsaal West Francesco Frassinelli (Norsk institutt for naturforskning), Maria Antonia Brovelli (Politecnico di Milano)

Intrinsic Assessment of OpenStreetMap Contribution Patterns through Exploratory Spatial Data Analysis

This study adopts a statistical approach based on Exploratory Spatial Data Analysis to identify underlying contribution patterns of OpenStreetMap. Univariate and multivariate analyses on a number of variables computed from OSM history on a regular hexagonal grid in Milan, Italy allow us to detect a number of local clusters and local outliers, which shed light on the complexity of OSM temporal evolution driven by active local contributors and communities, data imports, and mapping parties.

Patricia Solis (YouthMappers/Arizona State University), 14:00 Miriam Gonzalez (GeochicasOSM), Heather Leson Kleiner Hörsaal

Diversity and Inclusion in OSM in

The OSM community is global and diverse. Building on last year's Open Heroines conversation we will co-create a space for OSM to talk about how to improve diversity and inclusion in our amazing project. All welcome.

Wille Marcel Lima Malheiro, Andrey Golovin (Mapbox)

14:00

Using OSMCha to Understand Bad Edits in

Mathematikon C

Protecting OSM is a continuous process performed by Mapbox to secure maps from displaying erroneous edits. Any edits that raise suspicion are flagged in OSMCha, an open service that allows us to check low-quality changes that are made by the members of the OSM project in a shared database. This not only helps to report our findings to the community but examine them in aggregate and draw conclusions to improve our data quality processes.

Jerry Clough, Dan Stowell

14:30

Mapping Solar Panels Can Save Megatons of CO₂

Großer Hörsaal

We are working to map all the solar panels (photovoltaic, "PV") in the world. Why? The data can be used directly to reduce carbon emissions from power generation. We will share our experiences of surveying, aerial mapping, and machine vision to find all the hundreds of thousands of solar panels in our countries.

Lightning Talks IV

Hörsaal Ost, 14:30

Come to the welcome desk in the Chemie-Hörsaalgebäude to sign up. See the board there for an up-to-date schedule.

Jennings Anderson (University of Colorado Boulder), 14:30 Dipto Sarkar (National University of Singapore), Leysia Hörsaal West Palen (University of Colorado Boulder)

Corporate Editors in the Evolving Landscape of OSM: A Close Investigation of the Impact to the Map and Community

More than 17 million edits globally have been made by paid contributors in the last five years. We look at the long history of corporate involvement in OpenStreetMap and dig into the data to quantify the impact this latest evolution of corporate involvement is having on the map and explore the interactions between paid and volunteer mappers.

Huw Davies 15:00

National Trust - Managing a Path Inventory in OpenStreetMap

Großer Hörsaal

Towards an Open Paths Standard in OSM for the UK

The talk describes the use of OSM as part of an asset management process using a crowd of National Trust staff, volunteers, and the public to maintain a network inventory of an estimated 20 000 km of paths (both Public Rights of Way and permissive paths). The process pro-actively notifies local staff of changes to enable on-ground validation. The process required the definition, and consistent application of, a UK standard for path tagging.

Jochen Topf 15:00

OpenStreetMan Data Processing with Hörsaal Ost

OpenStreetMap Data Processing with PostgreSQL/PostGIS

The PostgreSQL database with the PostGIS extension is an important instrument in the toolbox of anybody working with OSM data. This talks explains the basics of working with the SQL database and how it handles geographic data. We will look at getting OSM data in and out of such a database and what we can do with the data once it is in there.

Levente Juhász (Florida International University), Hartwig Hochmair (University of Florida), Sen Qiao (Florida International University), Tessio Novack (Heidelberg University) 15:00 Hörsaal West

Exploring the Effects of Pokémon Go Vandalism on OpenStreetMap

This presentation describes the nature and life-cycle of carto-vandalism through a data-driven analysis of harmful edits originated from Pokémon Go players. It also assesses how the OSM community reacts to vandalism.

Alban Vivert (Nomad Maps/CartONG)

15:00

Nomad Maps, an Andean Cartographic Itinerancy by Bike ₩

Kleiner Hörsaal

Nomad Maps Film Documentary

Here is the *Nomad Maps documentary*: 5 months, 5200 kilometres across the Andes, 100 000 metres of positive altitude difference, all by bike, to meet the local contributors and projects of the OSM mapping community of Colombia, Ecuador, and Peru. An alternative way to see the uses of the OpenStreetMap!

Collaborative Cartography of Cycling Infrastructure for Route and Thematic Maps in Medellin, Colombia

15:30 Hörsaal Ost

The project created from the cooperation between GeoLab (Universidad de Antioquia), and SiCLas (group of cyclists), both present in Aburrá Valley (Colombia), proposes a collaborative mapping by bicycle users as an urban transport mode. The data generation from existing cycling infrastructure will allow an improvement of the OpenStreetMap database, and an optimisation in route calculation. In addition, the incorporation of surveys will allow the generation of thematic maps, such as the association of gender with mobility.

A. Yair Grinberger (Heidelberg University), Moritz 15:30 Schott (ibid.), Martin Raifer (ibid.), Rafael Troilo (ibid.), Hörsaal West Alexander Zipf (ibid.)

Analysing the Spatio-Temporal Patterns and Impacts of Large-Scale Data Production Events in OSM

In this talk, large scale data production events in OpenStreetMap are identified, characterised, and their spatio-temporal patterns and impacts are analysed. The results show that remote mapping events produce more data today than bulk imports, yet that the former type has a more lasting impact on representation, hence pointing towards possible steps for maximising the positive influences of events of different types.

Chris Fleming 16:30

Notes: Can We Do Better Experiences and Ideas from the Frontline

Großer Hörsaal

An analysis of Notes, based on local experience of managing notes.

Roland Olbricht 16:30
Mapper's Privacy Hörsaal Ost

OSM's processes are carefully designed to minimise the privacy footprint of the mappers. Nonetheless, the principle that any edit shall be attributable means that some data is still recorded. An overview is given of which data is recorded and which of it becomes available to whom.

Hannah Friedrich (Oregon State University), 16:30 Jamon Van Den Hoek (ibid.), David Wrathall (ibid.), Hörsaal West Anna Ballasiotes (ibid.)

Development after Displacement: Using OSM Data to Measure SDG Indicators at Informal Settlements

There are 250 million refugees and IDPs in informal settlements that are routinely excluded from population and settlement datasets as well as Sustainable Development Goals (SDGs) assessments. Here, we share results from ongoing research to map and assess SDG indicators at global informal settlements using OSM data and satellite imagery. We present a new OSM-driven schema for monitoring SDG progress that counters the exclusion of informal settlements from other assessments.

Simon Poole 16:30

Updating our Attribution Guidelines ₩ Kleiner Hörsaal

Most of the existing attribution guidance for OSM derived works dates back to 2012 and was written before or around the change of the OSM

licence to the ODbL. While there have been relevant discussions and rulings by the OSMF LWG (Licence Working Group) since then, there is no easy way to find it in one document. The LWG has undertaken to review the existing guidance and update it where necessary and is now asking for community input.

Harry Mahardhika Machmud

16:30

JOSM Turn Restriction: Improving Data Quality in

Mathematikon C

Using JOSM Plugins for mapping roads in an advanced way and improving data quality in OpenStreetMap.

Martin Lucas-Smith

17:00

Is the OSM Data Model Creaking?

Großer Hörsaal

OSM Tries to Represent Spaces as Flows (Lines), Resulting in Fundamental Compromises. Do We Need to Address This?

The OSM data model has facilitated rapid growth of community-created geodata which third parties can build on. But as more accuracy is needed in routing, cartography, and other uses, is this data model good enough? We are trying to represent spaces as flows, which result in fundamental compromises and inaccuracies. This talk will discuss real-world cases where this compromise is increasingly problematic.

Marc Farra (Development Seed)

17:00

Teams for OpenStreetMap

Hörsaal Ost

OSM Teams is a software framework for building team-based applications on top of OpenStreetMap. We will present how the software is built, why we think it's a good tool for communities, and how you can integrate your application with the framework.

Godwin Yeboah (University of Warwick), Rafael Troilo (Heidelberg University), Vangelis Pitidis (University of Warwick), João Porto de Albuquerque (ibid.)

17:00 Hörsaal West

Analysis of OSM Data Quality at Different Stages of a Participatory Mapping Process – Evidence from Informal Urban Settings

This study examines OpenStreetMap data quality at different stages of a participatory mapping process developed for understanding inequalities in healthcare access of informal urban residents in Africa and Asia. Recent studies have examined quality intrinsically and extrinsically. However, in both cases, the data production processes are often not completely transparent to researchers, therefore limiting possibilities for systematic data quality analysis of the processes leading to OpenStreetMap update.

Joost Schouppe (OSMF)

17:00

Local Chapters Congress

Kleiner Hörsaal

A place where local chapters can meet with each other.

Ilya Zverev (Juno Lab)

17:30

Broken Promises and Technical Difficulties Oh no, not That API 0.7 Talk Again

n OGC Simple Foa

Großer Hörsaal

Our data model is impractical, you know that. Even OGC Simple Features are better. Changesets and versions promised easier reverting – is it simple yet? We have added a lot of features to API 0.6 over the past ten years, but should we have? Let's see what went wrong and what we can improve.

Lightning Talks V

Hörsaal Ost, 17:30

Come to the welcome desk in the Chemie-Hörsaalgebäude to sign up. See the board there for an up-to-date schedule.

Christina Ludwig (Heidelberg University), Robert Hecht
(Leibniz Institute of Ecological Urban and Regional
Development), Sven Lautenbach (Heidelberg University),
Martin Schorcht (Leibniz Institute of Ecological Urban
and Regional Development), Alexander Zipf (Heidelberg
University)

Assessing the Completeness of Urban Green Spaces in OpenStreetMap

OpenStreetMap provides a lot of valuable information about urban green spaces, but the numerous and conceptually overlapping OSM tags that describe such features lead to spatially heterogenous representations in OSM. We developed an exploratory data analysis methodology to identify locally relevant OSM tags for mapping green spaces in a specific area and compared the extracted OSM features to administrative data to evaluate the level of completeness in regard to urban green spaces.

Poster Session

Mathematikon, 18:00

More details can be found at page 13.

forefront.

Monday Session Descriptions

Guillaume, Adrien Matissart (Qwant), 09:30
J. B. Griesner (Qwant) Großer Hörsaal

Qwant Maps: Geocode the World with OSM Data

A geocoder's purpose is to transform a textual user query into geographical coordinates. This task is complex for several reasons. Firstly, because the user query is freeform and may come with abbreviations, typography errors, different format standards etc. Secondly, no omniscient gazetteer exists to take into account of the complexity of the world administrative zones. We present some techniques used by Qwant Maps search engine to fulfil user needs.

Tobias Knerr 09:30
OSM2World: 3D OSM in Your Browser Hörsaal Ost

OSM2World is an open-source renderer capable of creating rich 3D worlds from OpenStreetMap data. It is now available as a web application powered by WebGL.

Jessica Bergmann 09:30

Kleiner Hörsaal

The Next Generation of Mappers: Learning from YouthMappers

What does it take to build a new generation of mappers ready to solve challenges within their community? This presentation will feature students from YouthMappers sharing how they are deciding what issues to map, engaging and training new mappers, especially women, and using map data to advocate for change in their local and global communities. Learn how you can plan your next mapping initiative with youth at the

The following YouthMappers will speak during this session:

- Diana Carolina Ortega Espinosa
- Confidence Kpodo
- Aman K C
- Micheal Kaluba
- Erneste Ntakobangize

Eugene Alvin Villar

09:30

OpenStreetMap and Wikidata: Awesome Together in

Mathematikon C

A workshop aiming to introduce Wikidata and how to contribute to it, to explain how Wikidata and OpenStreetMap are currently connected, and to discuss issues and ways for the OSM and Wikidata communities to further collaborate together.

Sebastian Ritterbusch (iXpoint Informationssysteme)

10:00

Routing for Humans

Großer Hörsaal

The OpenStreetMap provides probably the most comprehensive digital path network for pedestrians, which had been largely unused in its actual depth of detail so far. Based on findings from the TERRAIN project, this talk will go into detail how this network can be used for roadside-aware pedestrian navigation efficiently, and what challenges and mappings problems occurred. Furthermore, specific needs of various person groups will also have to be considered facing variable data quality.

Shinji Enoki

10:00

OpenDatathon Activities in Japan

Großer Hörsaal

As one of the outreach activities in Japan, OpenDatathon regularly holds mapping parties simultaneously with Wikipedia editing events. As a mem-

ber of an organiser group, I will introduce OpenDatathon case studies and consider their potential.

Sam Milsom (Open Data Manchester)

10:30

Mapping Mobility in Stockport

Großer Hörsaal

Creating a mobility map of Stockport town centre

In early 2019, Open Data Manchester teamed up with Stockport Council, Disability Stockport and Age UK Stockport to crowdsource data around mobility and accessibility in the town centre. This talk will cover the mapping methodology, findings, difficulties and solutions, as well as suggesting ways in which we can better map for these communities, making the data collected for OSM more inclusive and accessible for all.

Lightning Talks VI

Hörsaal Ost, 10:30

Come to the welcome desk in the Chemie-Hörsaalgebäude to sign up. See the board there for an up-to-date schedule.

Hrvoje Bogner (OpenStreetMap Croatia)

10:30

OpenStreetMap in Croatia

Kleiner Hörsaal

Großer Hörsaal

Community that builds the data, and community that uses the data.

Martin Dittus (Oxford Internet Institute), David Garcia (University of Canterbury)

11:30

Caretography - Mapping Difficult Issues with OSM during Difficult Times

We map because we care to represent the world. Yet maps are never "true", they are shaped by their creators and their circumstances. Mapmaking is world-making: Maps by different authors can give access to

different worlds. So how can we make, share, and use maps that are created *by* these worlds, and not just by a privileged few? How can vulnerable communities influence how they're represented and affected by our maps?

Adrien Pavie 11:30

Integrating and Validating Open Data in OSM Using Street Pictures

Integrating Open Data Remotely, the Right and Easy Way

Pic4Review now helps contributors to integrate open data properly in OpenStreetMap using street pictures validation. Discover the way it works and how this can help improve both OSM and open datasets.

Roland Olbricht 11:30

New Processes to Agree on Tagging Suggestions and Their Interaction with the Editing Software Available on openstreetmap.org

Kleiner Hörsaal

Hörsaal Ost

Tags are only helpful if one can understand what they mean. However, it is rather difficult to figure out the tag semantics, and there is no agreement how to agree on the semantics. The public communication channels mailing list and wiki discussions both have relatively low attendance. An incident gave rise to the rumour that in fact editing software developers were unilaterally controlling tags.

In this session the results of an open discussion before the conference will be presented, and attendees can contribute further thoughts during the event. The basic idea is to prioritise what most likely helps to get feedback from much more of the mappers using the tags. If you want to contribute beforehand, please send your suggestions to the talk@ or tagging@ mailing list, or email the host directly at roland.olbricht@gmx.de.

Custom Presets Creation Using JOSM ••

Mathematikon C

Experienced mappers only

Creating presets sometimes becomes a hassle if you do not have experience reading the XML language. There is a simple method to create presets using a JOSM plugin. This workshop will teach how to create presets using JOSM.

Victor Shcherb (OsmAnd)

12:00

Introduce OpenPlaceReviews and Connect Hörsaal Ost to OpenStreetMap

OpenPlaceReviews - Open, Collaborative, Trustworthy

As of today we have OpenStreetMap but it doesn't fit all data and some data is not recommended for submission. We've got user reviews request in OsmAnd and Maps.Me and we would like to collaborate with Open-StreetMap community to create independent open platform for reviews.

Davey Lovin

12:30

Access to Prosperity: Quantifying Infrastructure Impact with OSM

Großer Hörsaal

In many regions of the world a population's access to essential services is unduly constrained by a lack of proper infrastructure. By performing accessibility analysis using OSM data, we can understand how route infrastructure impacts access to essential services and use that information to inform an intervention.

This talk explores accessibility analysis performed to understand the impact of footbridge construction in Eswatini and introduces a python framework enabling users to perform similar analyses.

Lightning Talks VII

Hörsaal Ost, 12:30

Come to the welcome desk in the Chemie-Hörsaalgebäude to sign up. See the board there for an up-to-date schedule.

Antoine Riche (Carto'Cité, SNCF)

14:00

Pedestrian Routing in Complex Areas The Case of Paris Railway Stations

Großer Hörsaal

Have you ever been lost inside a gigantic railway station? SNCF, the French railway company, is developing a pedestrian routing and navigation service to help travelers find their way inside and around railway stations. This talk exposes the challenges and how they have been addressed to provide a robust solution that can handle the great variety of data as well as routing through open spaces.

Johan Wiklund (Entur AS)

14:00

Norway: Successful Deployment of OSM in Hörsaal Ost Public Transport

Norway has deployed OSM on a national level for journey planning and is taking initiatives to expand the user base and usage of OSM in Norway and abroad

Zacharia Muindi (Map Kibera Trust)

14:00

Participatory Mapping for Open Counties in

Kleiner Hörsaal

In Kenya most County Participatory budgeting (an intensive annual participatory budgeting process supported by World Bank) sessions rely on memory or on hand-drawn paper maps of existing terrain and features

in order to determine where they should place new water points, health centres, and other key new projects.

Beata Tautan-Jancso, Laura Dumitru (Telenav)

14:00

ImproveOSM

Mathematikon C

MissingRoads Workshop 🛶

In this workshop, OSM mappers and software developers Beata and Laura will help you get started adding the more than two million roads that are missing from OSM according to ImproveOSM, the global open dataset that compares actual car trips with OSM data.

Frédéric Rodrigo (Makina Corpus)

14:30

Automatically Annotate a Pedestrian Route with OSM Landmarks

Großer Hörsaal

Replacing the classic "Continue for about 200 m then turn left" by guidance instructions in more natural language automated from landmarks are still a research topic but aims to allow users to move with more confidence. The objective is to test it on an indoor/outdoor pedestrian route calculator. Anything that can be used as a landmark is extracted from OpenStreetMap, then categorised and classified to annotate the route: relevance, visibility, relative position etc.

Victor Shcherb (OsmAnd), Eugene Kizevich

14.30

Public Transport Navigation Using OpenStreetMap by OsmAnd

Hörsaal Ost

This presentation describes the stages of developing and starting a new feature in the OsmAnd app.

Adaptation of GraphHopper (routing and map matching) to the railway context in order to serve a vast diversity of usages.

Jiri Komarek (MapTiler)

15:00

OSM Vector Tiles in Custom Coordinate Systems

Hörsaal Ost

OpenMapTiles is an open-source set of tools for processing OSM data into vector maps, which can be produced in various coordinate systems.

Tasauf A Baki Billah (OpenStreetMap Bangladesh Foundation, Bangladesh Open Innovation Lab) 15:00

State of the Map Bangladesh

Kleiner Hörsaal

Transforming a Resilient Community by Institutionalising OSM

The story of community-based resilience activities in Bangladesh evolving into the institutionalisation of OSM and moving forward with a vision to ensure a sustainable open geodata ecosystem in Bangladesh.

Closing

Großer Hörsaal, 16:00

Thanks

SotM Working Group

Benoît Fournier Christine Karch (lead) Gregory Marler Marco Minghini Michael Reichert Mikel Maron

Local team Adam Rousell

Alexander Zipf
Benjamin Herfort
Carolin Klonner
Christina Ludwig
Fabian Kowatsch
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Rachel VanNice (part of organisa-

tion)

Samaila Alio Mainassara Sven Lautenbach Timofey Subbotin

Video recording

saerdner MichaelK mgehling Nakaner NHG

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Supporters Bergfex

Disy Geofabrik Omniscale Sinergise WhereGroup YellowMap







What we believe

- data-driven mobility is a chance for climate protection and sustainability
- interdisciplinary thinking generates innovative ideas
- mobility data is a societal good and must become a part of public infrastructure
- everybody must get the chance to participate in future sustainable mobility

What we do

- we use OpenStreetMap as geolocation data whenever possible
- we have initiated a series of open innovation formats like hackathons and scholarships
- we foster open mobility data publication and set up the technical infrastructure
- we support projects contributing to an open mobility data architecture

For further information please contact:

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With over 1.6 million subscribers, Geotab securely connects fleet and government vehicles to the internet, providing advanced analytics. The Geotab GO device extracts valuable information on vehicle health and running status. Geotab helps businesses manage safety, productivity and efficiency from one secured cloud platform.





DRIVING SOUTHEAST ASIA FORWARD

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Build experiences for exploring the world







edit, test and publish alternative transport schemes



Make changes starting from the existing network.



Verify everything is working as it should for all modes.



Publish the result, communicate about the changes.

Intermodal routeplanning, mobility management, traffic simulation & ITS design



TELENAV°

The problem is: The world is not flat. It's more complex than that.

JOIN US

LIGHTNING TALKS III:

- 1 HOW TO CREATE DATA ANNOTATION FOR NAVIGATION
- 2 ENHANCING OSM WITH MISSING ROADS

Sunday, 10:30 | Room: GHS

IMPROVE OSM: A MISSING ROADS WORKSHOP

Monday, 14:00 | Room: Mathematikon C

Dates and times are subject to change, stay updated via 2019.stateofthemap.org



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Responsible for the content: OpenStreetMap Foundation St John's Innovation Centre Cowley Road Cambridge CB4 0WS United Kingdom

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