UN-GGIM Academic Network

Tenth UN-GGIM: Europe Plenary - Session 8: Working in collaboration
23 November 2023

Prof. Maria Antonia Brovelli
Politecnico di Milano
UN-GGIM Academic Network

- Coalition of recognized universities, research and education centers or equivalent, involved in the research, development and training on geospatial and land information and related matters.

- Supporting UN-GGIM by:
  - facilitating access globally to research and education capabilities, and
  - respond to challenges and opportunities for UN-GGIM and related UN offices.
UN-GGIM Academic Network

• 69 members
• 3 associate members
• 38 countries
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<tr>
<th>Country</th>
<th>University</th>
<th>Primary PoC</th>
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<tr>
<td>Austria</td>
<td>University of Salzburg, Vienna University of Technology (TU Wien)</td>
<td>Josef Strobl, Georg Gartner</td>
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<td>Belgium</td>
<td>Katholieke Universiteit Leuven (KU Leuven)</td>
<td>Joep Crompvoets</td>
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<td>Denmark</td>
<td>Aalborg University Copenhagen</td>
<td>Jamal Jokar Arsanjani</td>
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<td>Germany</td>
<td>University of Münster</td>
<td>Christoph Brox</td>
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<td>Greece</td>
<td>National Technical University of Athens</td>
<td>Chryssy Potsiou &amp; Charalabos Ioannidis</td>
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<td>Italy</td>
<td>CNR IREA, Roma Tre University, Politecnico di Milano, Sapienza University of Rome</td>
<td>Paola Carrara, Roberto Bianchini, Maria Antonia Brovelli, Mattia Crespi</td>
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<td>Kazakhstan</td>
<td>The Institute of Geography</td>
<td>Dinara Abiyeva</td>
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<td>Kyrgyzstan</td>
<td>Kyrgyz State University of Construction, Transport and Architecture</td>
<td>Akylbek Chymyrov</td>
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<td>The Netherlands</td>
<td>University of Twente</td>
<td>Menno-Jan Kraak</td>
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<td>NOVA Information Management School</td>
<td>Marco Painho</td>
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<td>Russia</td>
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<td>Igor Okunev</td>
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<td>Serbia</td>
<td>University of Novi Sad</td>
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<td>Sweden</td>
<td>Lund University</td>
<td>Ali Mansourian</td>
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<td>Spain</td>
<td>Universitat Politècnica de València</td>
<td>Carmen Femenia-Ribera &amp; Gaspar Mora-Navarro</td>
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<td>Turkey</td>
<td>Karabuk University</td>
<td>Ismail Rakip Karas</td>
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<td>UK</td>
<td>Taylor and Francis Group *</td>
<td>Irma Britton</td>
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<td>Ukraine</td>
<td>KNUBA – Kyiv National University</td>
<td>Roman Shults</td>
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Our Objectives

• Promote and **foster collaboration** between universities and research entities/groups to support the operation of UNGGIM-IGIF

• **Encouraging members** to undertake work that is able **to contribute** to the UN-GGIM mission and UN-SDGs.

• Forum of geospatial academics and researchers to **advance competencies and qualifications needed for the UN-GGIM** and supporting Member States;

• Capacity Building and developing an **inventory of international education programs open to and recommended for UN-GGIM actors.**
Strategic Activities

• Academic Network Contributes across all UN-GGIM IGIF Strategic Priorities and Components
Strategic Activities

- Collaboration and joint activities with other UN-GGIM groups
- Annual UN-GGIM Side-events and Regional events:
  - 12th UN-GGIM Session 2022 “Trustful and Ethical Use of Geospatial Data: the Role of Academics”
  - 2nd WGGIC in Hyderabad, India 2022, “Bridging Academia and Industry in Geospatial Research, Education and Training” (jointly with PSN-GGIM Private Sector Network)
  - 13th UN-GGIM Session 2023, “GeoAI- Opportunities and Challenges”, jointly with PSN-Private Sector Network,
  - GeoAI for Good Series
- ITU’s GeoAI for Good series: e.g. Webinar on GeoAI Education, 14th June 2023

- Publications:
  - Book on ‘SDGs Connectivity Dilemma’, (Open Access), Lunched at UN-GGIM 2019
  - Book on ‘Mapping for a Sustainable World’ is applicable to IGIF
  - IJGI Special Issue: Trustful and Ethical Use of Geospatial Data (deadline: 31 December 2023)
GEOAI

- Geomatics And Earth Observation Artificial Intelligence
  AI Players in the AI landscaper by Country (top 20)

GEOAI

A webinar with panel discussion on GeoAI Education

Workshop on ‘Building a foundation for geospatial AI: defining a syllabus and body of knowledge’

A survey into the importance of GEOAI curriculum conducted in 2023
Participants: 70 Universities + 169 UN-GGIM Member States

GEOAI Syllabus for Developers
GEOAI Syllabus for Appliers
GEOAI Syllabus for Policy-makers
GEO Body of Knowledge
→ Side event: 29 May 2023
Strategic Activities

Invitation
UN MAPPERS MAPATHON IN 2022

The UN GGIM Academic Network and the UN Geospatial Network invite you to participate in a UN Mappers mapathon. A mapathon (literally ‘map marathon’) is a collaborative effort to improve OpenStreetMap data, very often for humanitarian purposes, in places where OpenStreetMap data is scarce or non-existent. During the mapathon, volunteers from various backgrounds get together to remotely map a specific area using satellite imagery or aerial photographs. Anyone can participate in a mapathon, no prerequisite geography or geomatics knowledge is required.

The aim of this mapathon is to raise awareness of UN missions and how they use open data sources for them, and to inspire students to contribute to these efforts. In this UN Mappers activation we are going to map building footprints, supporting UNSMIL to ensure peace in Libya. The data will be used to deliver a 3D digital replica of the city of Tripoli to allow peacekeepers to remotely visualize and analyze inaccessible locations on the ground, experience different kind of scenarios beforehand, and perform operational planning around a shared simulated sandbox.
Apart from learning how to contribute to data for UN missions, participating in the UN-GGIM Academic Network Mapathon will also give you insight into OpenStreetMap data and for which purposes it could be useful.
Strategic Activities

- http://unggim.academicnetwork.org/educational-material/

- Facilitate access to education via curated collection of resource contributed by UN-GGIM AN’s members:
Strategic Activities

- Politecnico di Milano (Italy)
- United Nations Institute for Training and Research (Thailand)
- National Geomatics Center of China (China)
- University of Pretoria (South Africa)
- Curtin University (Australia)
- Udine University (Italy)
- University of Cagliari (Italy)
- University of New South Wales (Australia)

Capacity Building for GIS-based SDG indicator analysis with global high-resolution land cover datasets

SDGs, open-source

Training Material

Data

Free & Open-source

GitHub repository
UN-GGIM Academic Network – Europe Branch

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Prof. Joep Crompvoets
Katholieke Universiteit Leuven (KU Leuven)
UN-GGIM Academic Network – Europe branch

- To support the aims and objectives of UN-GGIM (Europe) by facilitating access to European research and education capabilities
- Strong collaboration links with other regions (Americas & Africa, Australia)
- Strong links with EuroSDR, AGILE, EuroGeographics
- Attending annual session of United Nations Committee on GGIM
- Attending annual plenary of UN-GGIM Europe
UN-GGIM Academic Network Europe – Activities

Recent/Future research related to the following topics:

- Authoritative data
- Geo-ethics
- IGIF – Integrated Geospatial Information Framework
- FELA – Framework for Effective Land Administration
- Data Ecosystems and Spatial Data Infrastructure
- Support EuroSDR EduServ courses

Findings transferred to UN-GGIM Working/Expert Groups
Thank You!