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Papers

from the (Cancelled) International Conference

FOSS4G Europe 2020

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Edited by

Māris Nartišs, A. Yair Grinberger, Marco Minghini, Codrina Ilie Andreea Marin

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Pēteris Brūns, SIA SunGIS, Latvia

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Foreword

The history of free (meant as in the term *libre*, i.e. expressing freedom) and open source geospatial software can be traced back to the introduction of the first public domain Geographic Information Systems (GIS) suite — the Map Overlay and Statistical System (MOSS) — more than 40 years ago, in 1977 (Reed, a). Its creators emphasized that the GIS was planned to incorporate already existing public domain code resources as much as possible (Reed, a), thus exposing ideas of free GIS software six years before the formal birth of the GNU project in 1983 (Stallman, 1983), considered to be the pivotal moment kickstarting the Free Software movement. Similarly, right after the birth of the Open Source Geospatial Foundation (OSGeo) in 2006, the first Free and Open Source Software for Geospatial (FOSS4G) conference was held in Lausanne, Switzerland (OSGeo Wiki, 2020). This conference grew out of several earlier regional and international conferences organized by enthusiasts of open source geospatial. Among these, the FOSS/GRASS Users Conference in 2004 is considered the turning point in the consolidation of the various conferences held by open source GIS communities. As the worldwide FOSS4G conferences gained momentum, the need to scale such conferences to also involve local communities, in particular the European one, became apparent. In 2012 the first FOSS4G-CEE & Geoinformatics (FOSS4G in Central and East Europe) conference was held in Prague, Czechia, followed by a second conference held in Bucharest, Romania in 2013. Due to high attendance, which expanded beyond the geographical space of Central and Eastern Europe, in 2014 the conference was rebranded as FOSS4G Europe (FOSS4G Europe 2015 Organizing Committee, 2015) to better fit its scope. FOSS4G Europe conferences only take place in the years when the global FOSS4G event is not hosted in Europe (meaning two out of every three years, as the location of the conference repeatedly alternates between Europe, North America, and the rest of the world).

After the successful conferences in Bremen, Germany (2014), Como, Italy (2015), Paris, France (2017) and Guimarães, Portugal (2018), the fifth FOSS4G Europe conference was planned to be held in 2020 in Valmiera, Latvia. Valmiera is already well known to many QGIS users as the place of the 9th QGIS Developer Meeting in 2013 (QGIS.org, 2021), celebrated by the release of QGIS 2.2 with the codename "Valmiera". With all preparations underway for a great event from July 13th to 18th, strict lockdowns due to the ravaging COVID-19 pandemic ground to a halt all conference plans and forced the Organizing Committee to cancel the conference and postpone it to 2021. As the situation in 2021 has not improved and the prospect of having a physical conference in Valmiera looks unattainable, it is almost sure that the FOSS4G Europe conference will not take place also in 2021.

By the time the decision to cancel FOSS4G Europe 2020 was made, participants had already signed up and submitted their abstracts for the Academic Track, focused on FOSS4G applications in research. Hence the Scientific Committee, formed by the authors of this foreword, decided to keep the free software spirit alive and give a chance to the participants to still showcase their latest research achievements in a Special Collection of papers in the Baltic Journal of Modern Computing. This Collection includes 4 papers representing some of the latest pre-pandemic trends in the geospatial community. Luciani et al. (2021) present their contribution to the monitoring of environmental conditions using a FOSS4G-based workflow for satellite monitoring system of subalpine lakes implemented within the SIMILE project; Stoppe and Flenker

FOSS4G Europe 2020

(2021) present a unique and innovative application of FOSS4G tools, applying their principles to the case of designing and visualizing electronic printed circuit boards, facilitating smoother and more ubiquitous user experience; Takács and Siki (2021) look into the precision of local coordinate reference systems, required for even tighter integration of the GIS and surveying disciplines; Siki and Takács (2021) showcase the potential of free software-based solutions in the automatization of surveying by detecting and identifying control points for aerial photography and real-time building deformation monitoring. Together, these papers highlight issues that will probably remain high on the agenda of the FOSS4G community in the coming years, e.g., extending the capabilities and applications of free GIS tools, demand for even higher precision of location data, and automatic high precision monitoring of environmental conditions.

On a final note, we, the Guest Editors of this Collection, would like to express our appreciation and deepest gratitude to the reviewers of all the papers submitted to the Collection: Martin Raifer, Marius Budileanu, Mattia Previtali, Alexey Noskov, Michal Kepka, Christina Ludwig, Ionuț Iosifescu, Linda See and Cidália Costa Fonte. Last but not least, we are thankful to all members of the FOSS4G Europe 2020 Organizing Committee, who relentlessly strived towards holding the conference as planned, keeping the hope alive till the last moment.

Māris Nartišs, A. Yair Grinberger, Marco Minghini Codrina Ilie Andreea Marin

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