

10 YEARS OF MASTER OF SCIENCE IN GEOSPATIAL TECHNOLOGIES

Development of a Web App with GeoTech Students Data



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ABSTRACT

Master of Science in Geospatial Technologies is aimed at graduates wishing to obtain qualifications in fields where geographic information is applied and intend to have a multicultural experience. Geospatial information technologies have their roots primarily in three distinct areas: geosciences, computational technologies, and information science.

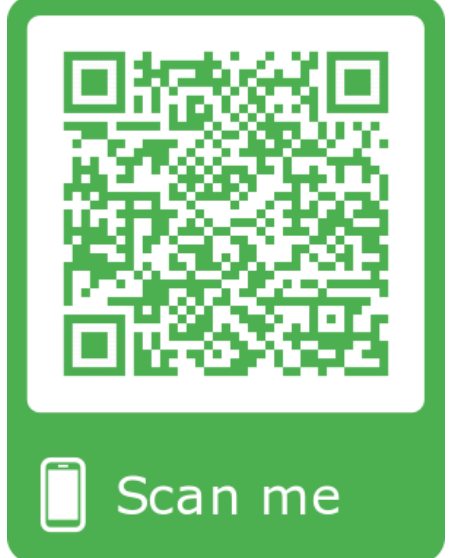
Students of the Master in Geospatial Technologies degree will be able to develop applications in Geoinformation systems, use GIS tools for analysis of spatial relations or manage natural and human resources strategically.

This poster presents a web application, built with the use of Esri's Web App Builder, in which is possible to reach specific information about Partner Universities, How many students from each countries attend the program, the Location of Partner Universities, Program Links and information about Students, their origins and their Master Thesis.

The Geotech Master Students Map Application provides an easy access to reach detailed information about the Master of Science in Geospatial Technologies Program.

KEYWORDS: Geographic Information Systems; Higher Education; Esri Web App Builder; ArcGIS Online.

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1. THE MASTER OF SCIENCE IN GEOSPATIAL TECHNOLOGIES

The main goal of the **Master of Science in Geospatial Technologies** - <http://mastergeotech.info/> - is to **train professionals** in geospatial technologies, a rapidly growing area with a shortage of professionals, therefore providing an excellent opportunity for a professional career in the field.

This **Erasmus Mundus-recognized Master of Science** program prepares students to exploit new technologies to **support environmental and societal decision-making** affecting the future of our planet. Graduates are now working at companies and government agencies, studying in top PhD programs, and teaching in their home countries. The European Commission provides stipends for 15-20 students and 3 scholars per year.

Geospatial information technologies have their roots primarily in **three distinct areas: geosciences, computational technologies, and information science.**

The **three partner sites** represent centers of **excellence in these areas**, recognized at the European and global levels:

- The **geoscientific and quantitative** foundations of Geoinformatics at **University of Münster**, Institute for Geoinformatics, **Germany**;
- The **computer science and technology** skills taught at **Universitat Jaume I**, Institute for New Imaging Technologies, Castellón, **Spain**;
- and the **mathematical and statistical** methodologies emphasized at **NOVA Information Management School**, Universidade Nova de Lisboa, Lisbon, **Portugal**,

complement each other in an ideal way to provide a rounded, but compact education in this **interdisciplinary technological field.**

The **three-semester** Masters program will enroll up to 32 students per year and language of instruction is English.

Students will attend the **first semester** in Lisbon or Castellón, the **second semester** in Münster. The **third semester** (Master thesis) can be performed at each of the three partner universities.

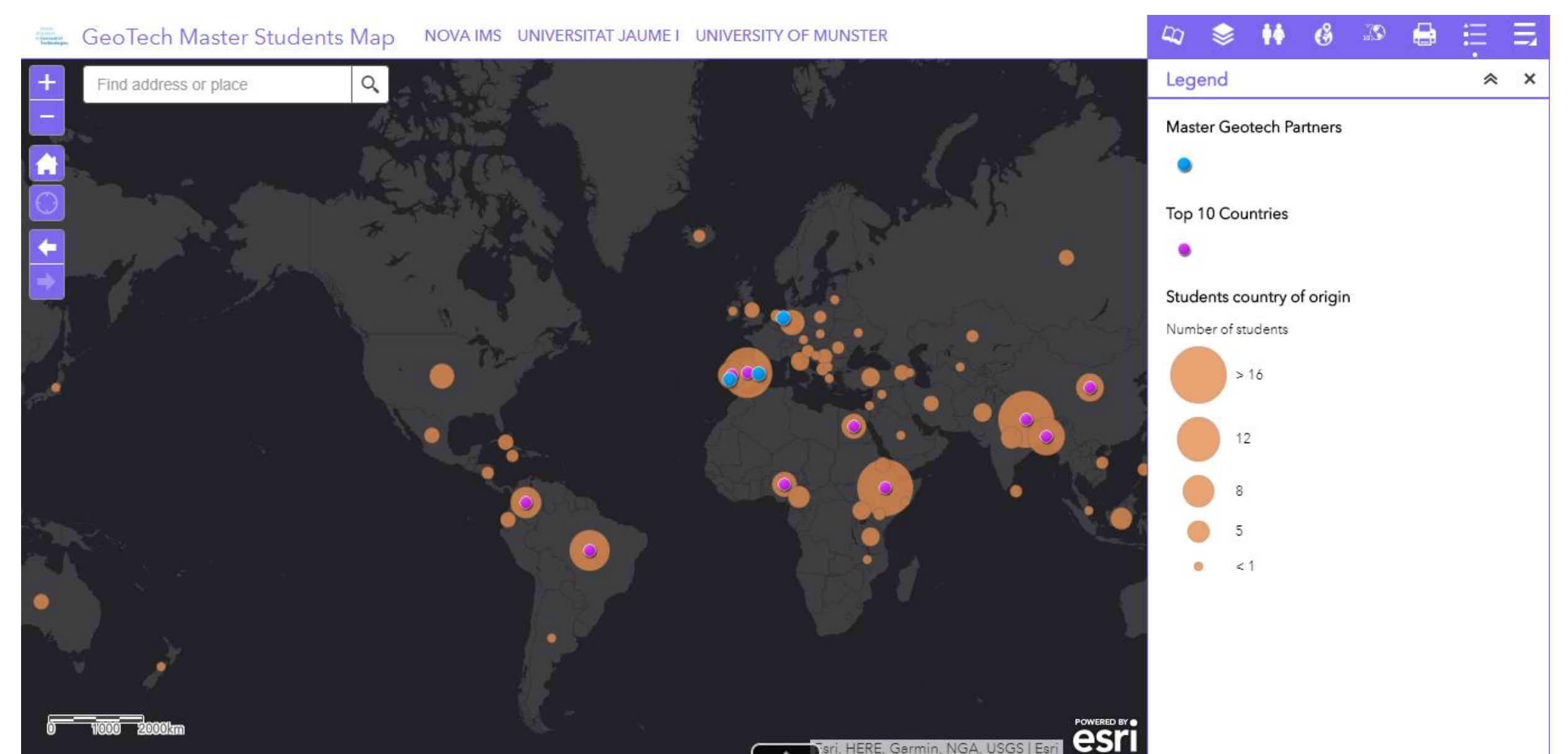
2. BUILDING A STUDENT DIAGNOSIS WEB APP USING ESRI APP BUILDER & ARCGIS ONLINE

In order to represent some **simple and quick results**, the authors created and configured a first simple version of a custom-made ArcGIS.com Web APP, built with the use of **Esri Web App Builder**, which contains information regarding **all the students** that were enrolled in the Master GeoTech Program since **2007 until 2018/2019.**

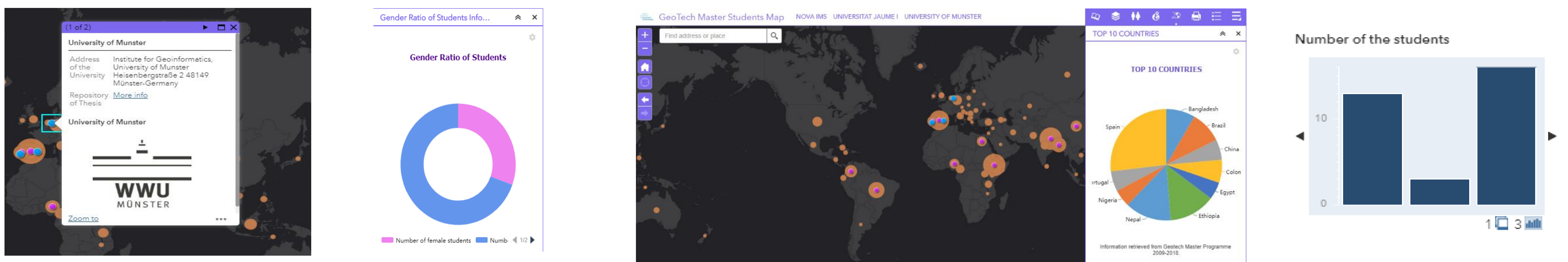
The Web APP can be accessed through this link (see features on the pictures below): <https://goo.gl/X7s6kS>

The Application is open to public, granting easy access to specific data about GeoTechMaster Students, namely:

- Overall number of enrolled students;
- Gender of student per nationality;
- Average age of Students per country;
- Access to the students Master Thesis;
- Information about the students country;
- Dynamic Infographics;
- Complete access to the "raw" data through attribute table;
- Web Links to the partner universities, containing the course program.



Finally, we can conclude that this ArcGIS.com Web APP solution really suited our needs since we needed to **develop a simple, fast and reliable technology** that could provide users with some clear results.



3. SOME INSIGHTS

242 ENROLLED STUDENTS SINCE 2007, IN WHICH 68 WERE FEMALES, AND 156 WERE MALES

TOP 5 THESIS TOPICS

TOP 10 STUDENTS ORIGINS

