MARIE SKŁODOWSKA-CURIE POSTDOCTORAL FELLOWSHIPS 2023

EXPRESSION OF INTEREST FOR HOSTING MARIE CURIE FELLOWS

HOST INSTITUTION

NOVA Information Management School

RESEARCH GROUP AND URL

NOVA Geoinformatics and Analytics Lab https://magic.novaims.unl.pt/en/nova-analytics-labs/

SUPERVISOR (NAME AND E-MAIL)

Marco Painho painho@novaims.unl.pt

SHORT CV OF THE SUPERVISOR

Marco Painho is currently a Full Professor at NOVA Information Management School (NOVA IMS). Coordinates the Master of Science Program in Geospatial Technologies (Erasmus Mundus) and the Master in Geographic Information Systems and Science.
Research interests include Geographic Information Systems, Information Integration, Crowed Sourced Geospatial Information, Spatial Analysis, GIS Education, and Information Infrastructures.
He holds a Bachelor's degree in environmental Engineering from the Faculdade de Ciências e Tecnologia of the Universidade Nova de Lisboa, a Master of Regional Planning (MRP) from the University of Massachusetts, a Doctor of Philosophy in Geography (Ph.D.) by the University of California and Habilitation Geographic Information Systems by the Universidade Nova de Lisboa.

5 SELECTED PUBLICATIONS

- Tang, V., & Painho, M. (2023). Exploring the relationships between perceived neighborhood boundaries and street network orientation. Transactions in GIS, 27(3), 877-899. https://doi.org/10.1111/tgis.13058
- Tang, V., Puri, J. & Painho, M., 20 Jun 2022. Mapping a historic neighbourhood through user-generated content: the case of Alfama, Lisbon (Portugal). Proceedings of the 25th AGILE Conference on Geographic Information Science, 2022. Parseliunas, E., Mansourian, A., Partsinevelos, P. & Suziedelyte-Visockiene, J. (eds.). Vol. 3. p. 1-8 8 p. (AGILE: GIScience Series; vol. 63).
- Cruz, P., Vanneschi, L., Painho, M., & Rita, P. (2022). Automatic Identification of Addresses: A Systematic Literature Review. ISPRS International Journal of Geo-Information, 11(1), 1-27. https://doi.org/10.3390/ijgi11010011
- Koukouraki, E., Vanneschi, L., & Painho, M. (2022). Few-Shot Learning for Post-Earthquake Urban Damage Detection. Remote Sensing, 14(1), 1-20. [40]. https://doi.org/10.3390/rs14010040
- Tonini, A., Painho, M., & Castelli, M. (2022). Estimation of Human Body Height Using Consumer-Level UAVs. Remote Sensing, 14(23), 1-21. [6176]. https://doi.org/10.3390/rs14236176

PROJECT TITLE AND SHORT DESCRIPTION

CityMe – Mapping regions in the city from citizens perceptions

City dwellers communicate and reason about their surrounding urban settings in the form of places and regions. Within the city, these regions are distinguished by their vernacular or official names, descriptions, spatial extents, and features related to their functionalities, purposes, intentions, and perceptions. Nonetheless, the formal names and the geographical coverage of official administrative areas and well-established function-semantic regions (e.g., financial districts, residential areas) are oftentimes inconsistent

with citizens' general perceptual consensus. This incongruence induces operational issues in urban planning, mostly because city partitioning strategies might be incompatible with overall citizens' judgment of the spatial distribution as well as the toponyms of neighborhoods, districts, and areas of interest. In the literature, two main approaches have emerged to obtain data on how different regions in the city are characterized and outlined by people: (i) data-driven methodologies applied to geotagged user-generated data; (ii) spatial and statistical analysis applied to responses from map-based surveys and questionnaires. Methodologies designed to extract perceived regions from both primary and secondary data sources are still scarce, and thus there is a clear opportunity to collect more information on people's spatial depictions of their cities. Therefore, the present research project aims at building a new methodological framework to delineate, characterize and compare the geographic features of perceived neighborhoods and regions within a city.

SCIENTIFIC AREA WHERE THE PROJECT FITS BEST*

ENG + SOC

***Scientific Area where the project fits best** – Please select/indicate the scientific area according to the panel evaluation areas: Chemistry (CHE) • Social Sciences and Humanities (SOC) • Economic Sciences (ECO) • Information Science and Engineering (ENG) • Environment and Geosciences (ENV) • Life Sciences (LIF) • Mathematics (MAT) • Physics (PHY)