Galo Romero García

Date of birth: 19/08/1994 | **Nationality:** Spanish | **Phone number:** (+34) 697396823 (Mobile) |

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LinkedIn: https://www.linkedin.com/in/galoromerogarcia/ | **Address:** Sevilla, Spain (Home)

ABOUT ME

Software Engineer and Geospatial Data Specialist with expertise in ETL workflows, SQL, Python, and database modelling. I have experience developing scalable data architectures and transforming complex datasets into actionable insights. Skilled in building robust, efficient solutions, I focus on enabling data-driven decision-making and delivering measurable results.

WORK EXPERIENCE

SOFTWARE ENGINEER – NTER TECH SERVICES – 09/2025 – Current – SEVILLA, SPAIN

Business or Sector: Professional, scientific and technical activities | **Department:** Data & BI | **Website:** https://nter.es/

Ensuring data quality and system performance by implementing Python-based validation rules within a scalable ETL framework, processing large and varied datasets through robust data modelling practices.

GEOSPATIAL DATA ENGINEER – IDENCITY – 07/2025 – 10/2025 – SPAIN

Business or Sector: Professional, scientific and technical activities | **Department:** GIS |
Website: https://www.idencityconsulting.com/en/

- Build, process, and validate geospatial datasets across multiple spatial scales
- Design efficient and scalable ETL pipelines to transform and manage complex geospatial data
- Deliver reproducible Python workflows (GeoPandas, ORS) with fully documented code
- Develop accessibility isochrones for urban facilities using population-based criteria
- Produce high-quality geospatial outputs to support informed spatial planning and decision-making

GEOSPATIAL DATA ENGINEER – MINISTERIO DE CIENCIA, INNOVACIÓN Y UNIVERSIDADES – 12/2021 – 04/2025 – SPAIN

Business or Sector: Professional, scientific and technical activities | **Website:** https://www.ciencia.gob.es/

- Development of relational databases using PostgreSQL
- Creation and implementation of web mapping applications with Leaflet
- Generation and management of RDF and INSPIRE-compliant metadata
- Design and maintenance of online databases using Bootstrap Table, HTML5, and CSS3
- Statistical and spatial analysis using the R programming language
- Data management and analysis with Pandas and NumPy in Python
- Spatial data processing with GeoPandas in Python
- Data visualisation using Matplotlib and Seaborn in Python
- Large-scale data processing in Snowflake using advanced SQL, with a focus on cleaning, transforming, and efficiently modelling datasets
- University teaching experience in Computer Applications and Statistics

GEOSPATIAL DATA ENGINEER – EUROPEAN COMMISSION – 10/2020 – 11/2021 – SPAIN

Business or Sector: Professional, scientific and technical activities | **Website:** https://commission.europa.eu/index_en

The project aims to convert archaeological data from the Iberian Peninsula into a Spatial Data Infrastructure (SDI) in compliance with the European Union's INSPIRE interoperability guidelines.

The development of the SDI includes the following activities:

- Design of a Spatial Data Infrastructure (SDI)
- Database processing and modelling, including data cleansing and organisation

- Design and integration of the database model: After processing and standardising the data, developed the data model that supports and feeds the geoportal
- Design and implementation of a relational database model to handle complex and large-scale datasets
- Integration of alphanumeric and geographic data in PostgreSQL/PostGIS databases, and processing of spatial information using Geographic Information Systems (GIS)
- Design and development of the geoportal and various internal tools for data consumption and visualisation
- Testing and validation of the overall system functionality
- Data organisation, analysis, processing, and normalisation
- Implementation of routines and automation of network analysis using the SoNIA library in R, and the development of Shiny applications for network analysis, geovisualisation tools (geo-viewers), and database interaction

GIS TECHNICIAN – EVENOR-TECH – 01/2020 – 06/2020 – SPAIN

Business or Sector: Professional, scientific and technical activities │ **Department:** GIS │ **Website:** https://evenor-tech.com/

Participation in the CONSOLE project (Contract Solutions for Effective and Lasting Delivery of Agri-Environmental-Climate Public Goods by EU Agriculture and Forestry).

- Performed statistical analyses using SPSS and R
- Prepared and wrote scientific and technical reports
- Conducted spatial analysis and mapping using ArcGIS and QGIS
- Managed and maintained databases, ensuring data accuracy and accessibility
- Supported project development through the research and analysis of bibliographic references

GIS TECHNICIAN – MINISTERIO DE EDUCACIÓN Y FORMACIÓN PROFESIONAL – 09/2019 – 06/2020 – SPAIN

Business or Sector: Professional, scientific and technical activities │
Website: https://www.educacionfpydeportes.gob.es/ministerio.html

- Digitised and mapped protected natural areas in Andalusia (Spain) using GIS platforms such as QGIS and ArcGIS

GIS TECHNICIAN – GEOGRAPHICA - CARTO – 03/2019 – 07/2019 – SPAIN

Business or Sector: Professional, scientific and technical activities │ **Department:** GIS and web development │
Website: https://carto.com/

Participation in the URBAN AUDIT project:

- Edited, corrected, and updated spatial data files in various formats using GIS software
- Managed and analysed spatial databases using SQL for geospatial data extraction and processing

EDUCATION AND TRAINING

06/2022 – 07/2022 Spain
POSTGRADUATE COURSE IN GEOGRAPHIC INFORMATION TECHNOLOGY, ORGANISED BY CSIC (CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS) Centro Tecnolóxico de Supercomputación de Galicia (CESGA)

Website https://www.cesga.es/en/home-2/

03/2022 – 03/2025 Sevilla, Spain
PHD CANDIDATE IN HISTORY Escuela Internacional de Doctorado Universidad de Sevilla (EIDUS)

Development of a Spatial Data Infrastructure (SDI) for managing and disseminating archaeological data on European Prehistory, emphasizing the integration and harmonization of heterogeneous datasets from multiple research projects to enhance accessibility, interoperability, and reuse within the academic and professional community.
(Thesis completed, pending submission).

Address Paseo de las delicias, 41013 , Sevilla, Spain │

Website https://doctorado.us.es/estudios/programas-de-doctorado/historia

2022
INTEGRATED SKILLS IN ENGLISH III - C1 (CEFR) Trinity College London

Website https://www.trinitycollege.com/

10/2019 – 07/2020 Sevilla, Spain
MSC IN GEOGRAPHY Universidad de Sevilla

Master's degree in Geographic Information Systems (GIS), focused on spatial database design, management, and geospatial data analysis. Skilled in geo-dissemination through the development of web-based GIS services and clients for interactive geospatial visualization.

Address 41004, Sevilla, Spain ｜ **Website** https://master.us.es/mastergeografia/ ｜ **Field of study** Geospatial Technology

FIRST CERTIFICATE IN ENGLISH - B2 (CEFR) University of Cambridge

Website https://www.cambridgeenglish.org/exams-and-tests/first/

10/2017 – 04/2018
GEOGRAPHICAL INFORMATION SYSTEMS FOR PROJECT MANAGEMENT AND RESEARCH TECHNICAL APPLICATION COURSE https://cfp.us.es/

09/2015 – 07/2019 Sevilla, Spain
BSC IN GEOGRAPHY Universidad de Sevilla

Bachelor's degree in Geography and Geographic Information Systems (GIS), with an emphasis on spatial database development and SQL-based geospatial data analysis and visualization.

Address Calle Doña María de Padilla, 41004, Sevilla, Spain ｜

Website https://www.us.es/estudiar/que-estudiar/oferta-de-grados/grado-en-geografia-y-gestion-del-territorio ｜

Field of study Geospatial Technology

HONOURS AND AWARDS

01/2021
Extraordinary master's degree award – Universidad de Sevilla

SKILLS

Data Gathering / Data Processing / Data Visualization / Data Analysis ｜ Geographical Informational Systems (GIS) ｜ HTML5 CSS Bootstrap ｜ Python ｜ R (programming language) ｜ PostgreSQL ｜ SQL ｜ Semantic Web Technologies ｜ Web Technologies ｜ Spatial Analysis ｜ Bootstrap Table ｜ Git and GitHub ｜ Visual Studio Code ｜ Web mapping ｜ LeafletJS ｜ GIS: Esri ArcMap, ArcGIS Pro, ArcGIS Server, QGIS and Geoserver ｜ Data Visualization Tableau ｜ Snowflake ｜ AI/Machine Learning ｜ Spark

LANGUAGE SKILLS

Mother tongue(s): **SPANISH**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C1	C1	C1	C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

RECOMMENDATIONS

Evenor-Tech GIS technician

Email fj.blanco@evenor-tech.com

Link https://drive.google.com/file/d/1UCyme17YBFY_2PdnyXC7xTAE_OMlsu11/view?usp=drive_link

Geographica S.L. GIS technician

Email jorge.chacon@geographica.com

Link https://drive.google.com/file/d/1YGvUEsbpiXfvlEz0HV5eKo0QNqYYFhps/view?usp=drive_link

CONFERENCES AND SEMINARS

01/09/2023 – 03/09/2023 Belfast
Reuse or Nothing! the Materialisation of R Principle Through the Implementation of a Spatial Data Infrastructure: Pepadb.

European Association of Archaeologists

Link https://www.e-a-a.org/EAA2023/Programme.aspx?WebsiteKey=4c013ea5-de96-432a-85f7-b1800c2303bf&hkey=f73d6cf5-b37e-4836-ad06-2ecea6b58060&Program=3#Program

01/04/2023 – 03/04/2023 Amsterdam
The reusability of geospatial data in archaeology using web applications: PEPAdb.

Computer Applications and Quantitative Methods in Archaeology

Link https://zenodo.org/records/7930992

03/04/2023 – 06/04/2023 Amsterdam
Implemantation of an archaeochemical tool for prehistoric data analysis and predictive modelling

Computer Applications and Quantitative Methods in Archaeology

Link https://zenodo.org/records/7930992

01/09/2022 – 03/09/2022 Budapest
Pepadb: Putting the FAIR Principles into Practice

European Association of Archaeologists

Link https://www.e-a-a.org/EAA2022/Programme.aspx?WebsiteKey=13a70299-9cf2-4cc8-98c2-2862c5c6a8dd&hkey=01dc47f6-68bd-4d87-bcdf-183a7eb484d2&Program=3#Program

PROJECTS

01/03/2023 – 31/08/2024
Âmbar local e redes de troca na pré-história da Península Ibérica: caracterizaçâo das fontes portuguesas como um caso de estudo global (2022.09207.PTDC)

Link https://sciproj.ptcris.pt/175913PRJ

01/09/2022 – 04/2025
Arqueología de las falsificaciones y la percepción: adornos y autopercepción en el mediterráneo occidental - PID2021-124421NB-I00

Link https://prisma.us.es/financiacion/15849

05/10/2021 – 31/03/2023
Investigación y desarrollo de nuevas tecnologías para el discurso del poder: imitando adornos de ámbar en la prehistoria reciente de Iberia - P20_01080

Link https://investigacion.us.es/sisius/sis_proyecto.php?ct=1&cs=&idproy=33567

01/01/2018 – 31/12/2021
Redes y Rocas Raras en la Península Ibérica y el Mediterráneo (VI-II Milenio AC) - HAR2017-83474-P

Link https://investigacion.us.es/sisius/sis_proyecto.php?idproy=28512

01/2020 – 06/2020
CONSOLE

Machine learning models were implemented to estimate organic carbon levels in olive crops.

Link https://cordis.europa.eu/project/id/817949/es

03/2019 – 07/2019
Urban Audit

Improved the quality of data to support the implementation of performance indicators in European cities.

Link https://ec.europa.eu/regional_policy/policy/themes/urban-development/audit_en

DRIVING LICENCE

Driving Licence: B

SCIENTIFIC PAPERS

07/2024
A supervised multiclass framework for mineral classification of Iberian beads

We present a supervised multiclass framework for the mineral classification of prehistoric beads that can be used to infer mineral species from a matrix of compositional data. We trained and compared some of the most commonly used algorithms for classification tasks in a workflow that is reproducible and reusable without the need to install any piece of software. As a proof-of-concept, we chose the best performer to carry out a real use case with two sample sets from different sites.

Link https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0302563

06/2024
Amber provenance as a Chrono-Cultural Proxy: Insights from FTIR analysis in the Iberian Peninsula

This study introduces new amber finds, presents fresh FTIR data on archaeological amber ornaments, and incorporates minor updates and bug fixes to the general catalog. It is the outcome of a thorough bibliographic review and on-site analysis and examination of the beads.

Link https://doi.org/10.1016/j.jasrep.2024.104647

06/2024
Crafting illusions: Human-made composite coating used to simulate amber beads in prehistoric Iberia

This paper aims to construct an empirically grounded narrative elucidating the development and function of resin-coated bead technology. Our methodology includes a comprehensive quantitative analysis of the coating and beads, an exploration of the interplay between technical choices and situational factors, and an investigation into whether the simulation of sensory performance characteristics played a pivotal role in the concept and design of resin-coated beads. Additionally, we synthesize data to unveil broader patterns related to the crafting and utilization of resin-coated and amber beads across time and space.

Link https://doi.org/10.1016/j.jas.2024.106011

01/2024
Unlocking archaeological data online via the PEPAdb (Prehistoric Europe's Personal Adornment Database) initiative for Open Science

PEPAdb (Prehistoric Europe's Personal Adornment Database) is a long-term, open-ended project that aims to improve access to archaeological data online. Its website (https://pepadb.us.es) publishes and analyses datasets about prehistoric personal adornment, drawing on the results of various research projects and bibliographic references.

Link https://doi.org/10.15184/aqy.2024.2