

Gerardo Ezequiel Martín Carreño

Spatial-data systems, engineered to a research standard of reproducibility.

me@gerardoezequiel.xyz
gerardoezequiel.xyz
LinkedIn
London, United Kingdom

PROFILE

Environmental scientist, spatial data scientist and full-stack engineer working across urban systems, location intelligence and evidence-led products. I move from research question to reproducible data pipeline, spatial model and interface, with particular attention to uncertainty and public usefulness. My work spans European retail location analysis, urban heat across six cities, circular urban systems and privacy-safe community intelligence.

EXPERIENCE

Professional experience

2026–present	Chief Technology Officer (Designate) CommunityAI, London Set the technology and data direction for an early-stage, privacy-safe community-intelligence proof of concept. Led an open-data rebuild with spatial validation, provenance, licence governance and reproducible release controls.
Sep 2023–May 2026	Full-Stack Spatial Data Scientist TJX Europe, London Delivered geospatial analysis for European markets and built cloud-native workflows connecting loyalty, footfall and demographic evidence.
Feb 2022–Feb 2023	Researcher and Spatial Data Analyst Metabolism of Cities · Horizon 2020 CityLoops, from London Co-developed and co-authored CityLoops' Urban Circularity Assessment method; built Sankey and CARTO outputs.
Jan 2020–Feb 2023	Freelance Spatial Data Analyst Ecotopia Urbana · Canary Islands and Catalonia Delivered freelance urban-sustainability consulting, municipal energy and emissions analysis.
Mar 2021–Feb 2022	Spatial Data Scientist (Intern), then Junior Researcher Metabolic · Horizon 2020 CENTRINNO, Amsterdam and London Intern from March to September 2021, then Junior Researcher from October 2021 to February 2022. Co-authored CENTRINNO's Cartography Alpha Version for nine European pilots; modelled EU27 building stocks and flows across 144 typologies for European Commission JRC study JRC130992; and trained a Sentinel-1/LUCAS land-use classifier in Google Earth Engine for an EEA-commissioned project.
Jun 2019–Jan 2020	Spatial Data Analyst (Intern) BCNecologia, Barcelona's urban ecology agency Developed a spatial allocation model for Barcelona's home-care service within the Superilles Socials programme, combining service demand, neighbourhood indicators and the superblock grid.

CAPABILITIES

Technical and research practice

Data engineering Python, SQL, dbt, Snowflake, PostGIS, DuckDB, GeoParquet, scheduled orchestration and data-quality gates.	Architecture and delivery Technology strategy, solution architecture, delivery design and stakeholder translation.
Spatial data science Python, SQL, PostGIS, GeoAI, spatial statistics, remote sensing, location intelligence and urban modelling.	Product engineering TypeScript, React, Next.js, MapLibre, deck.gl, APIs and browser-native analytics.
Urban and environmental research Urban metabolism, circularity, climate adaptation, material flows, housing and public-interest evidence.	

SELECTED PROJECTS

Selected projects

2026–present	CommunityAI Chief Technology Officer (Designate) Open-data architecture, spatial validation and governed release controls for area-level evidence. Project case
2026–present	Climate Intelligence Founder and full-stack developer Keyless climate-exposure prototype served through an API and read-only agent tools. Project case Live project
2024–present	Shaping Cool Cities Researcher and developer Reproducible data-fusion pipeline across six European cities at 30 metre resolution. Project case Code and methods

EDUCATION

Education and training

2022–2024	MSc Urban Spatial Science Centre for Advanced Spatial Analysis, The Bartlett, UCL · Distinction
2020	Software Engineering Immersive General Assembly
2018–2019	MSc Sustainable Intervention in the Built Environment (MISMeC) Vallès School of Architecture, Universitat Politècnica de Catalunya
2017–2019	MSc Sustainability Science and Technology University Research Institute for Sustainability Science and Technologies, Universitat Politècnica de Catalunya
2013–2017	BSc Environmental Sciences Faculty of Sciences, University of Granada

Project case studies and their supporting documents are available in the work index.