JORGE SAINZ DE AJA CURBELO

URBAN DESIGN SPECIALIST | URBAN COMPUTATION EXPERT | DATA ANALYST

Email: jorgesainzdeaja@gmail.com | Phone: +44 07543202736

Address: SE8 4DX, London, UK

PROFESSIONAL PROFILE

Urban Computation expert with a background in Architecture and Urban Design, holding a PhD in computational methodologies for urban regeneration strategies. Skilled in geospatial computation techniques using R and Python to develop mapping and generative tools that enhance decision-making in master planning and urban design. Passionate about integrating spatial data analytics with design processes for optimized urban development.

EDUCATION

Data Analyst (Levy-funded Apprenticeship L4)

Cambridge Spark, 2021

- Data management, web scraping, machine learning, supervised/unsupervised learning, and big data systems.

PhD in Urban Studies

Universidad de Las Palmas de Gran Canaria (ULPGC), 2017

- Developed a data-driven urban renewal methodology using evolutionary algorithms to generate urban interventions based on Quality of Life, Sustainable Tourism Development, and Network Accessibility indexes.

MSc in Urban Studies

Universidad de Las Palmas de Gran Canaria (ULPGC), 2011

- Research on spatial parameters influencing urban quality and their correlation with Quality of Life indicators for sustainable tourism-driven urban renewal.

Bachelor Degree (BA) + Master of Architecture (M.Arch)

Universidad de Las Palmas de Gran Canaria (ULPGC), 2010

- Specialization in Urban Design, with a thesis focused on parametric urban renewal methodologies.

KEY SKILLS

- Extensive experience in data management and analysis for informed urban planning.
- Application of Space Syntax theory and network analysis in urban development.
- Advanced mapping and visualization using Leaflet, Mapbox, and large-scale spatial datasets.
- Strong expertise in computational methodologies for master planning.
- Development of interactive web platforms for public engagement and geospatial analysis.
- Digital Twin and dashboard development for urban design projects.
- Design integration and evaluation based on data analysis and KPI performance.

PROFESSIONAL EXPERIENCE

Asian Development Bank (ADB)

International Expert Consultant for the Livable Cities Investment Program *(Part-Time, 12/2024 – Present)*

- Geospatial & spatial data management expert for the SUDA Capacity Development Program (Spatial and Urban Development Agency of Georgia).

McGregor-Coxall, UK
Associate Director, UK Biourbanism Lab Lead *(12/2023 – Present)*
- Leading the integration of data-driven methodologies in global master planning and architectural projects.
- Developing and implementing geospatial computation strategies.
- Spearheading digital design capacity building and bid management within the firm.

Grimshaw Architects, UK
Urban Computation Manager (Global) *(09/2019 – 08/2023)*
- Managed the implementation of computational methodologies in master planning projects worldwide.
- Developed geospatial computation strategies and led research initiatives.
- Provided advanced training and mentorship to urban designers.

Senior Urban Designer *(02/2018 – 09/2019)*
- Led the Heathrow Expansion Project (Northern Communities IDT).
- Designed parametric ROI tools and applied evolutionary algorithms for urban development (Poplar OSD).
- Managed community engagement strategies.

SQW China, Hong Kong SAR
Urban Design Consultant *(03/2015 – 11/2016)*
- Master planning consultant for Brunei Darussalam's Ministry of Industry and Primary Resources.
- Led master planning initiatives for the Brunei-Guangxi Economic Corridor and Brunei Bio-Innovation Corridor.
- Conducted country promotion activities in China (ASEAN Expo).

ULPGC, Spain
Researcher (Part-Time) *(06/2012 – 01/2014)*
- Researcher for the SEMACA project on sustainable tourism in the Macaronesia region (Canary Islands, Mauritania, Cabo Verde, Senegal).
- Visiting researcher at Universidade de Cabo Verde and Université Gaston Berger, Senegal.

ADDITIONAL EXPERIENCE

- **WSP**. Associate Director, Digital Design Lead (Architecture & Urban Design), UK, 2023.
- **IAAC**. Part time Lecturer (Master in AI for Architecture & the Built Environment), Spain, 2021-2022.
- **AECOM**. Contractor. Istanbul Transformation Masterplan, Spain, 2017-2018.
- **Perkins + Will**. Contractor. Dubai Design District D3, UAE, 2017.
- **Hong Kong Design Institute**. Part Time Lecturer (Architecture Degree), Hong Kong, 2015-2017.
- **Choi-Comer Asia**. Part Time. Urban Design Researcher, Hong Kong, 2016-2017.
- **Fruit Design & Build**. Architectural Designer, Hong Kong, 2014-2015.
- **Hard Studio**. Co-Founder, Architect & Urban Designer, Spain, 2010-2014.
- **L-P-A**. Urban Design Assistant, Spain, 2007-2008.
- **ULPGC**. Part Time. Urban Design Research Assistant, Spain, 2007-2008.

SOFTWARE SKILLS

- **Scripting:** R (Advanced), Python (Intermediate), Grasshopper (Advanced), C++ (Basic).
- **Web App/Dashboards:** Shiny (Advanced), RMarkdown (Intermediate).
- **Mapping/Visualization:** Leaflet (Advanced), Mapbox (Advanced).
- **GIS:** QGIS (Advanced), Grasshopper GIS add-ons (Advanced), ESRI (Intermediate).
- **3D Modeling:** Rhinoceros (Advanced).
- **CAD:** AutoCAD (Intermediate), MicroStation (Intermediate).
- **Adobe Suite:** Photoshop (Intermediate), InDesign (Intermediate), Illustrator (Advanced).
- **Office Tools:** Word (Advanced), Excel (Advanced), PowerPoint (Intermediate).

PAPERS & CONFERENCES PROCEEDINGS

- **The Location of Urban Hotels: The Case of the Puerto Canteras District in the City of Las Palmas de Gran Canaria.**
  Paper. International Congress on Tourist Destinations, Competitiveness, and Entrepreneurship.
  ULPGC. ISBN: 978-84-9042-090-4 · Dec 13, 2013
- **Urban Renewal Methodology Through the Introduction of Tourism Products in Urban Areas**
  PhD Thesis. ULPGC, 2017. http://hdl.handle.net/10553/54033
- **A data-driven approach for urban design and master planning development**
  Workshop. ACADIA, 2022
- **Urban Computation in the AEC industry.**
  Paper. ACADIA, 2024
- **Living Infrastructure: A Digital Approach to Urban Ecosystems**
  Conference Proceeding. Landscape Institute Digital Conference, 2024
- **Living Infrastructure: A Digital Approach to Urban Ecosystems**
  Journal Article. The Journal of the Landscape institute, 2024

ADDITIONAL INFORMATION

- **Nationality:** Spanish.
- **Languages:** Spanish (Native), English (Fluent), French (Basic Understanding).