

Dr. JAIRO H. GARCIA

jairoharcia@urbanclimatenexus.com

<https://www.linkedin.com/in/jairoharcia>

(+1) 404-210-7575

SUMMARY

Expert in urban climate change mitigation, adaptation and resilience developing and implementing policies in energy, water, and transportation systems to mitigate carbon emissions. Extensive experience performing inventories for Greenhouse Gas (GHG) emissions, designing Monitoring and Verification Systems (MRVS), and crafting climate action plans and policies for mitigation and adaptation. Experience using elements of spatial data analysis for ecological assessments and to identify climate vulnerabilities and risks analysis.

EDUCATION

- **Doctor in Educational Technology and Sustainability** **2010**
Pepperdine University, Los Angeles, CA
Dissertation: “Assessment of Education for Sustainable Development in Universities in Costa Rica: Implications for Latin American and the Caribbean”
- **M.Sc. Sustainability Management** **2012**
Columbia University, New York, NY
Capstone Project: “Climate Resilience: At What Price? An Analysis of the Complex Market for Flood Insurance in New York City” – Study executed for the New York Mayor’s Office of Long-Term Planning and Sustainability
- **M.Sc. Telecommunications and Network Management** **2001**
Syracuse University, Syracuse, NY
- **B.Sc. Electronic Engineering and Telecommunications** **1993**
Universidad del Cauca, Popayán, Colombia

PROFESSIONAL/TEACHING EXPERIENCE

Adjunct Faculty – (2019)

Georgia Institute of Technology, Atlanta, GA

Teaches graduate and undergraduate classes in sustainable urban development, sustainable cities capstone, and land use planning with the School of City and Regional Planning.

Executive Director (2018-2019)

Urban Climate Nexus, Atlanta, GA

Assists cities with analysis of energy systems, carbon emissions inventories, climate action/resilience plans, sustainability reports, climate/sustainability education, and any other climate/sustainability initiative.

Faculty – Graduate School of Information & Technology (2010-2017)

University of Phoenix

Taught and developed managerial level classes in computer networks with focus on concepts and business application of the Internet, server and storage architectures, green information technologies, and regulatory considerations.

Director Climate Policies and Renewables (2016-2017)

City of Atlanta Mayor's Office of Resilience, Atlanta, GA

Assisted the City of Atlanta in developing adaptation and mitigation policies and strategies (e.g., Global Protocol for Community Scale Emissions (GPC) and Global Report Index (GRI-v4)). Performed data collection and analysis of energy and transportation systems, and developed innovative policies and educational programs on GHG mitigation. Managed projects related to citywide sustainability initiatives including energy and water consumption, renewables, waste management, transportation, and urban agriculture. Coordinated stakeholder involvement and the development of City of Atlanta's Climate Action Plan. Lead the city's 100 Resilient Cities application.

Sustainability Management Analyst (2014-2015)

City of Atlanta Mayor's Office of Sustainability, Atlanta, GA

Performed specialized analyses of sustainability operations. Maintained ongoing reporting and analysis systems to provide continuing indicators of performance and trend analyses. Developed specialized reports of department and external trends, developments, or issues for use in strategic planning, goal-setting, and budget development. Planned and carried out special research and analysis projects as needed. Tracked and created programs and policies to promote energy and water efficiency, materials management, and GHG emissions mitigation. Prepared reports and presentations of findings and recommendations. Tracked advancement of legislation through the City's legislative process. Monitored committee and council meetings and records preparation. Maintained files, records legislative matters, and worked with assigned Assistant City Attorneys to craft sustainability-related legislation. Executed Project Management related to urban sustainability. Developed sustainability recommendations.

Adjunct Faculty - Independent Study - Thesis Advisor (2013)

Concordia University

Master of Arts in International Studies (MAIS)

Graduate Programs in Development, Business, and Education

Served as a Thesis Advisor for MAIS students in China in areas of Environmental Sustainability, Sustainable Business/CSR, and Sustainability & Economic Development

Instructor Global Sustainability - Water Rights (2012)

University of California - Los Angeles (UCLA)

Online instructor in *Water Law and Sustainability*: Water resource (domestic, tribal and international); water quality and climate change; existing water laws and policies; and how to propose changes to encourage efficiency, conservation, and promote sustainability

Kresge Implementation Fellow (2013)

Second Nature (NGO), Boston, MA

Supported colleges and universities in successfully advancing GHG neutrality and sustainability practices to fulfill the requirements of the American College & University Presidents' Climate Commitment (ACUPCC), with focus on Monitory-Serving Institutions (MSIs) and Under-Resourced Institutions (URIs). Supported and provided resources to members of the ACUPCC in developing GHG inventories, writing and implementing campus-wide climate action plans, developing sustainability research and curricular initiatives, performing analysis of energy and financing, and engaging senior leadership and community partnerships. Developed and coordinated training and consultation visits to MSIs and URIs campuses. Researched campus sustainability best practices and developed case studies. Managed ongoing communication of capacity building with MSIs and URIs. Coordinated evaluation activities and developed summary reports. Assisted in the preparation of financial planning and grant reports

Research Associate and Teaching Assistant (2011-2012)

Columbia University, New York, NY

Conducted comparative analysis of metrics for sustainability and carbon disclosure (CDP, DJSI, GRI, and CSR reports) for Fortune 500 organizations (environmental, corporate social responsibility, carbon neutrality, and labor compliance). Researched and participated in grant-writing and MOUs for the Earth Institute's sustainability programs with the NSF, US Department of Education, US Department of Energy, MacArthur Foundation, Ford Foundation, Kresge Foundation, and other private foundations. Performed an analysis of building energy efficiency programs for New York City (NYC), and proposed a strategic plan for policy and municipal legislative change to economically incentivize building owners in implementing retrofits to accelerate PlaNYC energy goals. Performed an analysis of the complex market for flood insurance in NYC and proposed a strategic plan for a municipal legislative change in flood zonings and FEMA compliance for climate adaptation and resilience. In conjunction with a Columbia University Professor in Urban Planning, presented a workshop to NYC communities on climate change vulnerability, adaptation, and resilience. In conjunction with a Columbia University Professor in Public Ethics, presented a webinar for the Earth Charter International on Ethics for Sustainability. Served as a Teaching Assistant for two graduate classes: Earth Practicum and Sustainable Water Management. Served as the VP of Academic Affairs for the Sustainability Management Program Student Association. Served

as a cofounder and special advisor for The Columbia University Coalition for Sustainable Development (CUCSD)

Co- Founder and Director of Educational Programs (2009- 2010)

GlobalEdTech, Atlanta, GA

Researched and developed Information and Communication Technologies (ICTs) for educational institutions specializing in sustainability with focus on climate change and climate actions plans.

International Consultant (2000- 2009)

Nortel Networks, Atlanta, GA

Endorsed with Job Complexity Index (JCI) #4. JCI measured the level of complexity in the field of computer networks engineering and project management, ranking from 1 (lowest) to 4 (highest).

Duties: Network engineer consultant and IT trainer specialist for global Nortel customers including The Coca-Cola Co. and Bombardier Inc. International computers network designer and project manager at the following locations: Buenos Aires, Argentina; Rio de Janeiro, Brazil; Santiago, Chile; Lima, Peru; San Jose, Costa Rica; San Juan, Puerto Rico; Mexico D.F., Mexico; Windsor, UK; Ballina, Ireland; Brussels, Belgium; Paris, France; Athens, Greece; Istanbul, Turkey; Beijing, China; Bangkok, Thailand; Sydney, Australia; Cairo, Egypt; Casablanca, Morocco; Abidjan, Ivory Cost; Nairobi, Kenya; Maputo, Mozambique; and Johannesburg, South Africa.

Network Control Analyst (1997-2000)

Vanderbilt University Medical Center, Nashville, TN

Designed, installed, and maintained the Vanderbilt MC computer network consisting of 14000 stations and 120 servers in 7 campus buildings.

Telecommunications Manager (1995-197)

South American Exchange (SAE) – New York, NY

Supervised a team of 15 telecommunications engineers in seven countries, who were in charged of maintaining and updating SAE's telecommunications infrastructure with a budget of US\$1.5 million.

CERTIFICATIONS

- Teaching Certificate “Designing for Climate Resiliency”.
Program approved by The American Institute of Architects **AIA**
HalfMoon Education **2018**
- Cities and Climate Change Certification – **UNITAR** **2018**
- Designing MRV Systems for Entity-Level GHG Emissions - Certification
World Bank Group **2018**
- Climate Reality Leadership Corps Certification **2018**
- Institute for Georgia Environmental Leadership Certification – **IGEL** **2018**
- Expert Certificate on Climate Change Science, Communications

- and Action – **Cornell University** **2017**
- LEED Green Associate - **USGBC** **2013**
- GRI-G4 Sustainability Reporting Certification -**ISOS Group** **2013**
- Certificate in Program Development and Evaluation, Advanced Grant Writing, Strategic Grant Research, and Advanced Communication Strategies - **The Grant Institute** **2007**
- Certification of Appreciation for notable services towards the advancement of the engineering education profession – **IEEE** **2007**
- Evaluator Certification- Accreditation Board for Engineering and Technology - **ABET** **2006**

HONORS AND AWARDS

- Georgia Tech “Thanks for Being a Great Teacher!” Award 2019
- EPA Individual Climate Leadership Award 2017
- Solar Advocate Award Finalist – Georgia Solar Energy Association 2017
- E3 Award Finalist – Metro Atlanta Chamber of Commerce 2016
- Top-10 Worldwide Reporter Carbon Disclosure Project (CDP) 2015
- Innovation Scholarship Award, *Columbia University* 2012
- Phi Delta Kappa International Honors, *Pepperdine University* 2010
- Certification of Appreciation for Notable Services Towards the Advancement of the Engineering Education Profession, *IEEE-USA* 2008

PUBLICATIONS

- Garcia, J. H., & D'Onofrio, D. (2018). A Multifaceted Approach to a Sustainable Transportation System: Reversing Transportation Trends in Atlanta, GA. In *Performance Measurement in Local Sustainability Policy* (Performance Measurement in Local Sustainability Policy ed., pp. 54-62). New York, NY: Routledge.
- Rudd, M.A., Moore, A.F.P., Garcia, J. et al. Climate research priorities for policy-makers, practitioners, and scientists in Georgia, USA. *Environmental Management* (2018). <https://doi.org/10.1007/s00267-018-1051-4>
- Garcia, J. (2017). *Atlanta GRI Sustainability Report*. <https://issuu.com/atlantasustainability/docs/2015-2016-atlanta-gri-sustainability>
- Garcia, J. (2015). *City of Atlanta Climate Action Plan*. <https://atlantaclimateactionplan.wordpress.com/>
- Davison, T., DeGise, J., Freund, P., Garcia, J., . . . Sarrinkolaou, G. (2012). *At What Price? An Analysis of the Complex Market for Flood Insurance in New York City*. Columbia University.
- Nugent, D., Rodriguez, L., & Garcia, J. (2012). *New Approaches in Graduate Education for Sustainable Development: Modalities of Field Training in the Master's in Development Practice Programs*. In W. Leal, *Sustainable Development at Universities: New Horizons*. Frankfurt: Peter Lang Scientific Publishers.

- Garcia, J. (2011). *The Role of Costa Rican Universities in Sustainable Development: Comparative Analysis Between Public and Private Institutions and its Implications for the Latin American Region*. New York, NY: 17th Annual International Sustainable Development Research Conference (ISDRC).
 - Garcia, J. (2010). *Education for Sustainable Development in Universities in Costa Rica*. Denver, CO: Annual conference of the Association for the Advancement of Sustainability in Higher Education (AASHE).
 - Kim, E. & Garcia, J. (2007). *A Methodology for International Research on Technology and Economic Development*. Honolulu, HI: Hawaii International Conference on Education.
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