Patricia Carbajales-Dale

Co-Director, Clemson Center for Geospatial Technologies (www.clemsongis.org)
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EDUCATION

Masters of Science in Geographic Information Systems (GIS)   2002
University of Redlands, CA.

Six year Degree in Environmental Engineering   1999
Polytechnic University of Madrid, Spain.

RELATED EXPERIENCE

Co-Director   2015 - Present
Clemson Center for Geospatial Technologies, Clemson University. Clemson, SC.
- Established the Clemson Center for Geospatial Technologies, which main mission is to support faculty, students, and staff with their geospatial needs
- Provides expert geospatial technology consultation services to Clemson researchers and students with varying needs and abilities ranging from basic GIS skills to research level analysis involving manipulating, customizing, querying, analyzing or modeling of spatial data.
- Teaches introductory-level and advanced classes in GIS and spatial analysis. Coordinates workshops and seminars on new geospatial techniques.
- Contributes to faculty research projects and collaborates on grant proposal applications that have a geospatial component.

Advanced Cyberinfrastructure Research & Education Facilitator   2014 - Present
Cyberinfrastructure Technology Integration, CCIT, Clemson University. Clemson, SC.
- Supports faculty and researchers at Clemson and affiliated ACI-Ref Universities in the use of new advanced cyberinfrastructure technologies such as HTC and HPC and their application to geospatial data analyses and processing.
- Supervises a team of GIS analysts that create, manage, and support advanced spatial analysis utilizing distributed parallel architecture for big data processes.

Geospatial Manager   2010 - 2014
Stanford Geospatial Center, Stanford University. Stanford, CA.
- Expanded the geospatial program at Stanford to support the entire community of students, faculty, and staff based on immediate needs and long-term goals developed in conjunction with a variety of departments and programs across the University.
- Supervised a team of experts to support geospatial data management, project support, and GIS instruction based on assessment of ongoing campus user needs.
- Developed key partnerships with over 25 departments across campus and integrated GIS learning in the classroom in collaboration with faculty from Earth Sciences to Urban Studies, Hydrology, Engineering, Business, and Spatial History among others.
- Developed and designed over 40 tutorials and workshops targeting specific disciplines in their use of GIS technology. Taught over 200 GIS workshops to more than 1,500 Stanford patrons (undergraduates, graduates, post-doctoral scholars, faculty and staff).

GIS Lecturer   2010 - 2014
School of Earth Sciences, Stanford University. Stanford, CA.
- Main instructor for the Earth Sciences class: "Fundamentals of GIS", which caters to students from across the entire university, from Urban Studies to Civil and Environmental Engineering.
- Designed and taught "GIS for Good", a new approach to teaching GIS as a service learning class partnering with international organizations through real-world projects, including UNHCR, IRC, and JIPS.

- Expanded course curriculums by fostering collaborations with non-profit and private organizations across the US, Africa, Europe, and the Middle East.

Geographer, GIS Projects 2006 - 2010
Campus Planning and Design, University of California in Santa Barbara, CA.
- Provided all GIS services following planning principles and applying advanced database management and cartographic procedures. Developed a series of best practices guidelines for data collection and publication of geospatial data across departments based on current infrastructure and long-term needs.
- Trained senior staff (architects, planners, engineers) in GIS and its applications
- Managed a GIS Internship program with students from the Geography Department at UC Santa Barbara.
- Supervised consultant work in the development and integration of GIS data into Campus Mapping Standards.

GIS Specialist 2003 - 2006
Integrated Water Resources, Inc. Santa Barbara, CA.
- Lead and supported of a variety of water resources GIS projects and tasks, including management of projects and coordination with clients involving geospatial databases and GIS analysis.

PRESENTATIONS & PUBLICATIONS

- "Open Space Value and Model for Land Acquisition in San Timoteo Canyon". **ESRI Headquarters, Redlands. California**. 2002 (presenter).
- "Exploring the possibilities of GIS technology". Summer Seminar Series, **Materials Research Laboratory, California NanoSystems Institute, UC Santa Barbara**. 2008 (guest lecturer)
- "GIS as a Tool for Long Range Development Planning". **ESRI User Conference, San Diego**. 2008 (presenter)
- "A Coastal Campus Prepares for Growth: GIS Aids Long-Range Development Planning", **Geoworld magazine**. April 2009.
- "The Power of GIS". Urban Studies mapping practicum. **Stanford University**. Spring 2010 (guest lecturer)
- "Training Non-GIS Experts in the Use of Geospatial Tools". **GeoJISC**. **London**. November 2011 (presenter)
- "Imaging the World: GIS at Stanford University". **Education-Portal**. November 2011.
- "Power of Potential". **Education-Executive**. January 2012.
- "Data visualization for journalists". **John Knight Journalism Fellowship Program** at Stanford University. March 2012 (guest lecturer)
- "GIS Flourishes at Stanford University". **ArcUser** Magazine, Summer 2012.
- "Spatial Statistics and GIS". 7th Annual Conference on Empirical Legal Studies (CELS). **Stanford Law School**. November 2012 (presenter)
- "Introduction to Fusion Tables". Mapping Environmental Scenarios & Solutions with Google Technology. **Institute at the Golden Gate & Google Inc**. Cavallo Point. March 2012 (instructor)
- "Visualizing Campaign Donations with Fusion Tables". In collaboration with Jayant Madhavan, Technical Lead of Fusion Tables project, Google Inc. **Bicoastal Datafest**, **Stanford-Columbia**. February 2013 (instructor)
- "Cultivating Research Skills: An interdisciplinary approach in training and supporting energy research". **American Geophysical Union** (**AGU**). San Francisco. December 2013 (presenter)
- "Introduction to mapping and data visualization". Institute for Justice & Journalism, **Migration Hackathon,** Mexico City. February 2014 (instructor)

- "Program Your Future: Geospatial Session". Program Your Future for middle school girls in the Bay Area. **University of Berkeley**. May 2014 (instructor)
- "GIS Summer Institute". Summer Research College. Department of Political Science. **Stanford University**. June 2014 (instructor)
- "Introduction to geospatial technologies". High School Summer Internship program, School of Earth Sciences. **Stanford University**. June 2014 (instructor)
- "GIS & Spatial Statistics for Sociologists". New Models and Methods in Social Sciences. Department of Sociology. **Stanford University**. July 2014 (guest lecturer)
- "Design & Technology in the Digital Age: Data Meets Society – GIS Session". Humanities, Entrepreneurship and Technology (Heat) Summer Institute Program. **Stanford University**. July 2014 (guest lecturer)
- "Story Telling with GIS". Creative Inquiry - Geography (GEOG 3990). **Clemson University**. January 2015.
- "Advanced Cyberinfrastructure Research and Education Facilitators Program". **Advancing research computing on campuses: Best Practices workshop** (ARCC). Clemson University. March 2015 (panelist)
- "CyberGIS Symposium: Frontiers in CyberGIS Education". **Association of American Geographers**. Chicago. April 2015 (panelist)
- "GIS for Good: A Service Learning Approach for Teaching GIS". **ESRI Educational Conference**. San Diego. July 2015 (presenter)
- "Disease Risk & Landscape Attributes of Tick-Borne Borrelia Pathogens in the San Francisco Bay Area, California". Salkeld DJ, Nieto NC, Carbajales-Dale P, Carbajales-Dale M, Cinkovich SS, Lambin EF (2015). **PLoS ONE** 10(8): e0134812. doi:10.1371/journal.pone.0134812
- "Broadening Participation in OSG", **Open Science Grid All Hands Meeting**, Clemson University, March 2016 (panelist)
- "Experimental Learning Environments", **Coalition for Networked Information** (CNI) Spring 2016 Meeting, San Antonio, Texas, April 2016 (presenter)
- "Educating the next generation in cyberGIS Challenges Opportunities", CyberGIS Curriculum Workshop, San Francisco, California, April 2016 (position paper)
- "The Human Side of Supporting Research", **Internet2 Global Summit**, Chicago, May 2016
- "Policymaking under a human rights framework". **Association of American Geographers Annual Meeting**, Boston, April 2017 (presenter)
- "Article 15: Understanding the Human Right to the Benefits of Science to Help Progress and Its Applications". **Association of American Geographers Annual Meeting**, Boston, April 2017 (panelist)
- "Giving Meaning to the Right to Enjoy the Benefits of Scientific Progress and its Applications: A Multi-Method Interdisciplinary Project". **Southern Sociological Society Annual Meeting**, Greenville, April 2017 (presenter)
- "New Frontiers in Research and Data", **University Consortium of Geographic Information Science (UCGIS) Annual Symposium**. Arlington, Virginia, May 2017 (panelist).
- "A CyberGIS Multi-Criteria Harvest Assessment Framework", **University Consortium of Geographic Information Science (UCGIS) Annual Symposium**. Arlington, Virginia, May 2017 (presenter)
- "Geography of the 2016 Presidential Election and Why It Matters". **ESRI International User Conference**, San Diego, July 2017 (presenter)
- "Universities Leveraging GIS for Facilities Management". **ESRI International User Conference**, San Diego, July 2017 (presenter)
- "Realizing the Right to Science in Policy and Practice", **American Association for the Advancement of Science (AAAS) Science and Human Rights Coalition**, Washington DC, July 2017 (moderator)