

JULIANO CALIL

Santa Cruz, CA, 95060
juliano.calil@gmail.com

EDUCATION

Doctor of Philosophy (Ph.D.) in Ocean Sciences / Coastal Adaptation | March, 2017

University of California, Santa Cruz (UCSC), Ocean Sciences Department

Dissertation: Multidisciplinary approaches to Coastal Adaptation.

Committee: Dr. Gary Griggs (chair), Dr. Raphael Kudela, Dr. Zdravka Tzankova.

Leadership: Founder of Coastal Climate Adaptation Chapter of MARINE (Monterey Area Research Institutions' Network for Education) at the Center of Ocean Solutions at Stanford University.

Selected Coursework: Ocean Policy; Climate Dynamics; Physical Oceanography; Ocean Modeling; Machine Learning; Teaching in Ocean Sciences; Graduate Research Seminars: presentations.

GPA: 4.0/4.0

Master of Environmental Science and Management (MESM) | March, 2012

University of California at Santa Barbara, Bren School of Environmental Science & Management

Thesis: The Effects of Climate Change on the Production Costs of the Dairy Industry in the U.S.

Specialization: Climate and Energy.

Selected Coursework: Climate Change Impacts and Adaptation; Science Communication; Geographical Information Systems (GIS); Remote Sensing of the Environment; Oceans in a Changing World; Earth Systems; Cognitive and Behavioral Aspects of Risk and Decision Making.

Bachelor of Business Administration (BBA) | December, 1997

Fundação Armando Álvares Penteado – São Paulo, Brazil

End of Course Paper: Business Plan for an internet cafe in São Paulo, Brazil (completed with Honors).

TEACHING EXPERIENCE

Graduate Student Instructor, University of California, Santa Cruz

Multidisciplinary Approaches to Coastal Adaptation | OCEA 173; OCEA 273 | Winter 2016

- Developed a new multidisciplinary course, focused on coastal risks, vulnerability assessment, and coastal adaptation. Course format was a combination of lectures, in-class activities, and group presentations, with multiple guest speakers from various disciplines, including: Earth Sciences, Climate Change, Coastal Risks, Conservation, California Coastal Policy, Science Communication, and Presentation Skills.
- Course was offered to undergraduate and graduate students to UCSC and external students through the "Wicked Marine Problems" course series offered by MARINE.
- Instructor evaluation: 4.8/5; Class evaluation 4.6/5.

Teaching Assistant, University of California, Santa Cruz

Our Changing Planet | OCEA 80B | Spring 2015 and Fall 2015

- This course explored an interdisciplinary scientific perspective on Earth system, focusing on human impacts on global environment. Introduces concepts of Earth system science and explores topics such as global warming, ozone depletion, pollution, deforestation, future climate change, as well as adaptation concepts.
- Conducted weekly discussion sections with students, teaching climate and climate change concepts including: Earth Sciences, Climate Fundamentals, Carbon Cycle, the Intergovernmental Panel on Climate Change (IPCC), Climate Change Impacts, Adaptation and Mitigation. Developed course website and tracked grades (E-Commons). Prepared 14 on-line quizzes and in-class group activities for 100 students.

Continued

Business Intelligence, Data Modeling, and Performance Tuning instructor

Courses included: Business Intelligence Fundamentals, Data Extraction and Migration Techniques, Database Design, and Multi-Dimensional Modeling | Fall 2003 – Fall 2011

- Conducted 20+ instructional workshops (ranging from 1 to 4 days) covering various aspects of Data Warehouse and Business Intelligence best-practices and implementation techniques, related to the SAP environment.

High School Math and Physics Tutor

Founded a volunteer organization to teach weekend classes to disadvantaged students in the outskirts of São Paulo, Brazil. Students were preparing to take local universities admissions 'exams | 1991 – 1992

WORK AND LEADERSHIP EXPERIENCE

Senior Scientist, Coastal Vulnerability (consultant), Santa Cruz, CA, February 2015 – September 2016.

City of Imperial Beach, Sea Level Rise Assessment.

- Co-developed a one-line model to forecast coastal erosion response to various coastal adaptation scenarios including: armoring, managed retreat, beach nourishment and sand dunes restoration. Responsible for calculating nuisance flooding frequency under future scenarios. Developed multiple maps of coastal flooding for various sectors including: wastewater, storm water, schools, hazardous materials, land use, and roads. Attended multiple stakeholders and city council meetings.

The Nature Conservancy, Senior Scientist, Independent Contractor, October 2013 – June 2015;

Climate Change Impacts, Adaptation and Hazard Mitigation

- Senior Scientist for Economic Impacts of Climate Adaptation Strategies for Southern Monterey Bay report. Responsible for literature review of Beach Ecology indicators, and the development of a Beach Ecology Index including three categories: Beach Ecology, Physical Attributes, and Human Impacts.
- Devised a cost/benefit analysis of 'engineered' versus 'nature-based' defenses to mitigate coastal flooding related to climate change at the Gulf Coast of the U.S. - based on the Economics of Climate Adaptation (ECA) methodology.
- Developed a multi-criteria spatial analysis model to identify and prioritize areas where coastal floods intersect with natural habitats in California. Reviewed hazard mitigation grants and policies.
- Presented results at the California Emergency Management Agency (Cal EMA), August 2011.
- Graduate Student Fellow, June 2011 – September 2013

VIP Consulting (formerly MyITgroup), Los Angeles, CA, September 2003 – January 2011

Program Manager / Data Warehouse (DW) and Business Intelligence (BI) Solutions Architect

- Lead Architect at Northrop Grumman Corporation. Defined the long-term DW architecture and BI roadmap, including: software selection, organizational structure and master data strategy.
- Managed several projects across multiple sectors with budgets between \$500K and \$2M, and teams of several sizes (from 4 to 21 members). Established and sustained strong, long-term partnerships with key internal and external decision makers for multiple clients.

PriceWaterhouseCoopers LLC, Boston, MA, December 2000 – September 2003

Principal Consultant – Data Warehouse Practice

- Principal Business Warehouse Consultant and Team Leader at Gillette, Burger King, and Honeywell Accounts.
- Provided leadership and technical guidance for one of the largest data warehouse initiatives at the Gillette corporation including master data strategy, and global spending, with data from 30+ systems in 9 countries.
- Completed several internal and external project and architecture reviews.

Panex Consulting, Houston, TX, May 2000 – December 2000

Lead Data Warehousing Consultant at Compaq Computer Corporation (Now HP)

- Lead consultant responsible for the project schedule, project preparation, and data management strategy, for the supply chain migration to SAP BW. Developed and presented numerous workshops to executives.

SAP Brasil, São Paulo, Brazil, September 1998 – May 2000

Senior Data Warehousing Consultant

- Responsible for all aspects of the first SAP-BW project in South America at Perdigão Brazil. BW instructor for the first SAP - Advanced Planning and Optimizing (APO) Academy in Brazil.
- Participated in multiple ‘spot’ assignments solving complex integration problems.
- Hosted multiple “meet-the-experts” sessions at the first SAP E-Universe event in South America.

Itaú Unibanco S.A. (largest private bank in Brazil), São Paulo, Brazil, October 1993 – August 1998

Systems Analyst / Disaster Recovery Coordinator

- Coordinated 30+ Disaster Recover Simulations. Coordinated the “war room” during a data center migration for the largest bank merge in Brazil prior to 1999.

AWARDS, FELLOWSHIPS, and HONORS

- UCSC’s Chancellor’s Graduate Teaching Fellows program 2016. “Multidisciplinary Approaches to Coastal Climate Adaptation” course offered to graduate and undergraduate students; winter 2016.
- Alumni Association Award at UCSC’s Graduate Research Symposium; 2016.
- Ocean Sciences Outstanding Student Award; UCSC, 2015.
- Honors in qualifying exam; UCSC, 2014.
- Cota Robles Fellowship; for potential to become excellent faculty or researcher in institutions of higher education and foster diversity in graduate education (2012 – 2017); \$72,000.
- Student Research and Education Award; Friends of the Long Marine Lab; (2014 – 2015); \$1,000.
- The Nature Conservancy’s Summer Research Fellowship (summer 2011); \$5,600.
- Fundação Armando Alvares Penteado, undergraduate scholarship (1996– 1997); \$2,000.
- Honors in undergraduate end of course paper; FAAP, 1997.

PUBLICATIONS

- **Calil J**, Beck M.W., Gleason M., Merrifield M., Klausmeyer K., Newkirk S. (2015). Aligning Natural Resource Conservation and Flood Hazard Mitigation in California. PLOS ONE 10(7): [doi:10.1371/journal.pone.0132651](https://doi.org/10.1371/journal.pone.0132651).
- Reguero, B. G., Bresch, D. N., Beck, M. W., **Calil, J.**, & Meliane, I. (2014). Coastal risks, nature-based defenses and the economics of adaptation: an application in the Gulf of Mexico, U.S. Coastal Engineering 2014. Seoul, Korea. Available at: <https://goo.gl/nxR5fw>
- **Calil, J.**, Silvester, A., Stelzl, K., & Wissel-Tyson, C. (2012). The Effect of Climate Change on the Production Costs of the Dairy Industry in the United States. Available at: <https://goo.gl/4KiIKJ>

WORKING PAPERS, REPORTS, AND OTHER PUBLICATIONS

- **Calil, J.**, Rueda, A., Reguero, B., Losada, I. J., Mendez, F. J.. Comparative Coastal Risk Index (CCRI): A multidisciplinary risk index for Latin America and the Caribbean (under review).
- **Calil, J.** & Newkirk S. Aligning Natural Resource Conservation, Flood Hazard Mitigation, and Social Vulnerability Remediation in Florida (under review).
- King, P., Revell D.L., Giliam, J., **Calil, J.** City of Imperial Beach Sea Level Rise Economic Impacts assessment. Journal of Ocean and Coastal Economics (in review).
- Revell, D. L., King, P., **Calil J.** et al. (September 2016). City of Imperial Beach Sea Level Rise Assessment. Available at <https://goo.gl/xiGzTn>

- **Calil, J.** Conservation and FEMA Can Beat Godzilla. Cool Green Science, December 15, 2015. Available at: goo.gl/Vq4Xnr
- Leo, K., Newkirk, S., Heady, W. N., **Calil J.**, and 10 others (May 2016). Economic Impacts of Climate Adaptation Strategies for Southern Monterey Bay. Climate Risk & Resilience Resources Library. The Nature Conservancy. Available at: <https://goo.gl/nuoXc5>

SELECTED PRESENTATIONS AND CONFERENCES ATTENDED

- **Speaker:** UCSC’s Graduate Research Symposium 2016: “Multidisciplinary Approaches to Coastal Adaptation”. Santa Cruz, CA. April, 2016. Received division award for best talk.
- **Invited Speaker:** “Multidisciplinary Approaches to Coastal Adaptation”, Ocean Sciences department seminar. University of California Santa Cruz. November, 2015.
- **Invited Speaker** at the **Ocean and Coastal Resources Management Speaker Series:** “Adaptation Alternatives to Coastal Hazards”. Center for the Blue Economy, Middlebury Institute of International Studies (MIIS). Monterey, CA, September 2015.
- **Invited Speaker:** “Aligning Natural Resource Conservation and Flood Hazard Mitigation in California”. Monterey Area Research Institutions’ Network for Education (MARINE) colloquium. Cal State University Monterey Bay (CSUMB). Moss Landing, CA, 2014.
- **Invited Speaker:** Coastal Defenses – Flood Mitigation and Conservation in California. The Nature Conservancy’s All-Science Conference. Santa Clara, CA, December 2013.
- **Attendee:** TNC’s Marine Aggregation Conference. Monterey, CA, February, 2014.
- **Attendee:** Esri User Conference. San Diego, CA, July 2013.
- **Attendee: Rio + 20,** United Nations Conference on Sustainable Development, Brazil, June 2012.
- **Attendee:** Catastrophe Modeling Conference, Reinsurance Association. Orlando, FL, February 2012.
- **Attendee:** Various SAP Technical Education and sales conferences (2008 to 2011)

OTHER SKILLS

Software: Geographical Information System (ArcGIS); MATLAB; Microsoft Access Database & Database Design;
Languages: Native Portuguese, Fluent English (written and spoken), Advanced Spanish (reading and spoken).

OTHER INTERESTS AND HOBBIES

- Remote Sensing: using Unmanned Aerial Vehicles (UAVs) to map and reduce coastal risks.
- Innovative uses of Virtual Reality as a science communication and decision support tool.
- Kitesurfing.
- Aikido (Japanese martial art).