

## Ricardo Camanho Mastroleo

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### Education

- **MS** in Computer Sciences - University of Texas at Austin, USA
- **Ph.D.** in Physics - University of Texas at Austin, USA
- **MS** in Physics - University of São Paulo, Brazil
- **BS** in Physics - University of São Paulo, Brazil

### Work History

- Department of Physics at Texas State University (fall 2016 to present)  
*Lecturer*  
Taught Elementary Physics-1310, Elementary Physics-1320, Mechanics-1430, Python Lab-2230, Mechanics I-3311, Electromagnetic Field Theory I-4310, Electromagnetic Field Theory II-4315, Quantum Mechanics I-4312, Selected Studies in Physics-4320, Advanced Quantum Mechanics-5312, and Physics for Educators-1365.

Created and taught the graduate course Advanced Computational Methods for Physics-5350I.

Coordinated the course Mechanics-1430 and the Mechanics-1430 Labs.

- Austin Community College (summer & fall 1997, spring & summer 1998, spring 1999, summer 2007 to present)  
*Adjunct Professor of Physics*  
Taught Conceptual Physics I, General Physics I and II, Applied Physics (for sonography students), and Engineering Physics I and II.

Created and currently teach the Honors Engineering Physics courses I and II, in which, besides the regular curricular content, students also learn the computer language Python to model more realistic and complex physical systems.

- Interact LLC, powered by NewNet Communication Technologies (Jan 1998 to March 2016)  
*Senior Software Engineer*
  - Responsible for technical support and software maintenance of proprietary Session Initiation Protocol (SIP) stack for the Interactive Voice Response (IVR) and IP-PBX product line.
  - Developed test suite in an automated environment for SIP signaling testing.
  - Developed Voice Over Internet Protocol (VoIP) applications based on the Session Initiation Protocol (SIP), using C++ on Linux platform.
  - Developed a Signaling System 7 (SS7) Server to provide telephony signaling information for several IVR platforms using C++ on Linux platform.
  - Developed a Simple Network Management Protocol (SNMP) agent to monitor various processes running on the IP and Signaling Server (Linux) platforms, using C++.
- Southwestern University, Georgetown, TX, (1993-1994, spring 2001)  
*Assistant Professor of Physics*  
Taught Fundamentals of Physics II, Electromagnetism I and II and Quantum Mechanics at undergraduate level.
- University of Texas at Austin, TX, (1997)  
Computational Fluid Dynamics Lab

*Research Associate*

Developed software to perform remote visualization of very large data sets defined on meshes produced by finite element analysis in High Performance Computing simulations using C++ on Solaris platform.

**Publications**

- See list of articles in scientific journals, proceedings of international conferences and technical reports at <https://sites.google.com/a/austincc.edu/mastroleo/publications>.