Alfio Martini

Computer Scientist, especially interested in programming, the applications of logic in computer science, and in full stack web development.

Technologies (Web Apps)

Frameworks	React	Node	Express	Flask	Django
Programming	JavaScript	Python	Isabelle	Haskell	
Markup & Styling	html	css	Bootstrap	Semantic-UI	

Experience

PUCRS (2002 - 2019)

Associate Professor

CS Course Coordinator (2012 - 2018)

Tutor of Government's Tutorial Education Program, PET (2018 - 2019)

Tutor of Government's Tutorial Education Program, PET (2005 - 2010)

Teaching: Data Structures, Logic for CS, Theory of Computation, Formal Languages, Formal Methods, Functional Programming

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ULBRA (1999 - 2002)

Associate Professor

Teaching: Logic for CS, Theory of Computation, Formal Languages

Education

(2020 - Harvard)

CS50's Web Programming with Python and JavaScript

CS50's Introduction to Computer Science

(1999 - PhD Thesis)	Relating Arrows between Institutions in a Categorical Framework, Technische Universität Berlin
(1995 - Master Thesis)	An Introduction to Category Theory and its Application to Computer Science
(1992 - Bachelor's Thesis)	A User Interface for the solution of Numerical Problems

Main Publications (Publications)

- Martini, A. Reasoning about Partial Correctness Specifications in Isabelle/HOL. Revista de Informática Teórica e Aplicada - RITA - Vol. 27, Num. 3 (2020) 84-101.
- Wolter, U., Martini, A., Haeusler, E.H. Indexed and Fibred Structures for Hoare Logic. Eletronic Notes in Theoretical Computer Science, vol 348, 1 March 2020, Pages 125-145.
- Wolter, U., Martini, A., Haeusler, E. H. Towards a Uniform Presentation of Logical Systems by Indexed Categories and Adjoint Situations. Journal of Logic and Computation, Volume 25, Issue 1, February 2015, Pages 57–93.
- Martini, A. Programming Language Semantics with Isabelle/HOL. In 2th Workshop-School on Theoretical Computer Science, WEIT2013. IEE Xplore, 2013.
- Martini. A., Wolter, U., Haeusler, E. H. Fibred and Indexed Categories for Abstract Model Theory. Logic Journal of the IGPL, Volume 15, Issue 5-6, October 2007, Pages 707–739.