Jordan E. Fisher

Curriculum Vitae

jordan@math.ucsb.edu
www.math.ucsb.edu/~jordan
+001 (316) 680–8246

Department of Mathematics
University of California
Santa Barbara, CA 93106, USA

EDUCATION

Ph.D.	**University of California, Santa Barbara**	Mathematics	June 2011 (expected)
	Advisor: Hector D. Ceniceros		
B.S.	**University of Kansas**		May 2006

RESEARCH

Areas of Interest: Flow-structure interaction, bio-fluid dynamics, numerical methods and the Immersed Boundary Method.

Current Work: Efficient implementations of the Immersed Boundary Method. Developing novel methodologies involving Multigrids, Treecodes and Fast Multipole Methods.

PROFESSIONAL EXPERIENCE

Research Assistant, University of California, Mathematics Department (2007-Present).

Working with Professor Hector Ceniceros to develop novel implicit methodologies to remove stiffness from the Immersed Boundary Method.

Supported by the National Science Foundation under grants NSF-DMS 0609996 and NSF-DMS 1016310.

Visiting Researcher, Universidade de São Paulo, Departamento de Matemática Aplicada (Winter 2009, Summer 2010)

Seminars

Universidade de São Paulo, Gave a two talk series covering the methods developed in my research

Graduate Lecturer, University of California, Mathematics Department (2009).

Taught a full class of Calculus to 100 students, including directing two teaching assistants.

Teaching Assistant, University of California, Mathematics Department (2006-2007).

Primary responsibility was to lead discussion sections. Assisted in various classes, including graduate level Analysis.

PUBLICATIONS

"Efficient solutions to robust, semi-implicit discretizations of the immersed boundary method." *Journal of Computational Physics, 228(19):7137 7158, 2009.* (October 2009).

"A fast, robust, and non-stiff Immersed Boundary Method." *Journal of Computational Physics* (Submitted).

PROGRAMMING SKILLS

Extensive experience with Python, C, C#, C++
Extensive experience with computer graphics, especially real time rendering and Graphical User Interfaces

LANGUAGES

Fluent in English, Portuguese