Mario Barrenechea

CONTACT INFORMATION

mobile: +1-508-904-7750
email: mario.barrenechea@colorado.edu
website: http://www.mbarrenecheajr.com

OBJECTIVE

I am a motivated, hard working graduate student pursuing software engineering research and development opportunities that will challenge me to become a knowledgeable, experienced professional in the academic and industrial market.

EDUCATION

- 5th year Ph.D. student in computer science specializing in software engineering and crisis informatics and studying with Ken Anderson at the University of Colorado at Boulder.
- Bachelors of Science (BS) in computer science from the University of Massachusetts Amherst.

PROFESSIONAL EXPERIENCE

EPIC (Empowering the Public with Information in Crisis) - Graduate Researcher and Developer (Fall 2011 - Current)

- Studying the socio-technical phenomena of disaster victims using software during and after mass emergency events. My thesis explores the socio-architectural design of software systems, uses empirical methods to evaluate their architectures, and enables their users to solve important societal problems during disaster events.

Onsystex - Software Engineering Intern (Summer 2013-2015)

- Developed interfaces for connecting and retrieving data from the OASYS proprietary database.
- Leading code re-organization efforts for OASYS in Linux and managing business code projects in GitHub.

Fidelity Investments - Software Engineering Intern (Summer 2010)

- Performed testing efforts to support email productivity across across a large-scale user base of enterprise devices within the company.

BAE Systems - Sensor Systems Engineering Intern (Summer 2009)

- Brainstormed, designed, and implemented a simulation for viewing infrared modes housed within Raptor class aircraft.

Vertica Systems - Software Engineering Intern (Summer 2008)

- Designed and developed a performance profiling tool for visualizing bottleneck queries with the Vertica database system.

ACHIEVEMENTS

- Awarded National Science Foundation (NSF) Graduate Research Fellowship (GRF) Honorable Mention for 2012 based on three essays, recommendation letters, and research platform.
- Managed the UMass Amherst ACM Student Chapter as Vice President (2009-2010) and President (2010-2011) and hosted frequent corporate events to help link students with recruiters.
- Awarded the STEM Scholar Internship Match Scholarship in 2008 for my professional contributions to the engineering team at Vertica Systems (now acquired by HP).

TECHNICAL

- **SE processes** {Agile, Rapid Prototyping}
- **Design processes** {Personas, Think-alouds, Cognitive Walkthroughs}
- **Management**: Small (2-3) Teams.
- **Development Editors:** {Sublime, Eclipse, Emacs, Netbeans, Visual Studio}
- **Databases:** {Cassandra, PostgreSQL, MongoDB, Solr}
- **Web Frameworks:** {Ruby on Rails, Django }
- **Dev Ops:**{Vagrant, Puppet}
- **Programming Languages:** {Ruby, Python, Java, C/C++}, Web {HTML/CSS/JS}
- **Version Control:** {Git, SVN}