Faculty of Computer, Communication, and Information Science

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## HEATHER MILLER

Citizenship

USA

Research Interests Programming language design and implementation for distributed programming. I'm interested in using type systems to facilitate the design of new, functional distributed systems.

Education

EPFL, Lausanne, Switzerland Ph.D. in Computer Science

Advisor: Martin Odersky 2011 –

University of Miami, Coral Gables, FL

2006 - 2009

2009 -

BSEE in Electrical Engineering, Audio Engineering, with honors, May 2009

Cooper Union for the Advancement of Science and Art, New York, NY 2004 – 2006

Service

Committees: Scala 2014 (co-chair), Scala 2013 (co-chair)

Reviewer for: ECOOP 2013

**Publications** 

Functional Programming For All! Scaling a MOOC for Students And Professionals Alike

ICSE 2014

Heather Miller, Philipp Haller, Lukas Rytz, Martin Odersky ACM SIGPLAN International Conference on Software Engineering

RAY: Integrating Rx and Async for Direct-Style Reactive Streams

REM 2013

Philipp Haller, Heather Miller

Workshop on Reactivity, Events and Modularity

Instant Pickles: Generating Object-Oriented Pickler Combinators for Fast and Extensible Serialization

OOPSLA 2013

Heather Miller, Philipp Halller, Eugene Burmako, Martin Odersky ACM SIGPLAN Conference on Object Oriented Programming, Systems, Languages and Applications

FlowPools: A Lock-Free Deterministic Concurrent Dataflow Abstraction

LCPC 2012

Aleksandar Prokopec, Heather Miller, Tobias Schlatter, Philipp Haller, Martin Odersky

International Workshop on Languages and Compilers for Parallel Computing

## Tools and Frameworks for Big Learning in Scala: Leveraging the Language for High Productivity and Performance

BigLearn 2011

Heather Miller, Philipp Haller, Martin Odersky NIPS Workshop on Parallel and Large-Scale Machine Learning

## Parallelizing Machine Learning – Functionally: A Framework and Abstractions for Parallel Graph Processing

Scala 2011

Philipp Haller, Heather Miller Scala Workshop

## **Awards**

US National Science Foundation Graduate Research Fellowship (2009)	2011-2014
EPFL Outstanding Teaching Award	2012
EPFL Computer Science Fellowship	2009 - 2010
Most Outstanding Audio Engineering Student, University of Miami	2009
Most Outstanding Eta Kappa Nu Student, University of Miami	2009
Information Technology Scholarship, University of Miami	2006-2009
John Farina Family Scholarship, University of Miami	2006-2009
Eta Kappa Nu	2008
Tau Beta Pi	2008
SMART US Department of Defense Scholarship Alternate	2007
Cooper Union Full Tuition Scholarship	2004 - 2006