Institute for Software Research Carnegie Mellon University Pittsburgh, PA 15213



## CHRISTOPHER MEIKLEJOHN

education

Ph.D., Software Engineering, Carnegie Mellon University, expected 2022.

Transferred from Université catholique de Louvain to Carnegie Mellon University in August 2018.

B.S., Information Technology, Northeastern University, 2009.

Summa Cum Laude, Sigma Epsilon Rho Honor Society.

A.S., Computer Science, Community College of Rhode Island, 2006.

research internships

Research Internship, Microsoft Research, Redmond Lab, 2019

Project: Deterministic replay with algebraic effects.

Mentor: Sebastian Burckhardt

Research Internship, Microsoft Research, Redmond Lab, 2018

Project: Stateful programming with serverless architectures: shipped as Azure Durable Entities.

Mentor: Sebastian Burckhardt

Research Internship, Microsoft Research, Redmond Lab, 2017

Project: Transaction support in Orleans: shipped in Orleans.

Mentor: Phil Bernstein

invited talks

"Distributed Erlang: From Datacenter Applications to Planetary Scale Applications." Keynote, Erlang '18

publications

Conferences

Christopher Meiklejohn, Heather Miller, Peter Alvaro, "Partisan: Scaling the Distributed Actor Runtime" *ATC '19.* 

Christopher Meiklejohn, Vitor Enes, Junghun Yoo, Carlos Baquero, Peter Van Roy, Annette Bieniusa "Practical Evaluation of the Lasp Programming Model at Large Scale: An Experience Report" *PPDP '17* 

Christopher Meiklejohn, Peter Van Roy, "Lasp: A Language for Distributed, Coordination-Free Programming" *PPDP '15* 

Workshops

Christopher Meiklejohn, "Partisan: Enabling Real-World Protocol Evaluation." APPLIED '18

Christopher Meiklejohn, Heather Miller, Zeeshan Lakhani, "Towards a Solution to the Red Wedding Problem" *HotEdge '18* 

- Christopher Meiklejohn, Peter Van Roy, "Towards A Systems Approach To Distributed Programming" *OBT 18*
- Christopher Meiklejohn, "On the Design of Distributed Programming Models" PMLDC '17
- Christopher Meiklejohn, "A Certain Tendency of the Database Community" Salon de Refusés '17
- Christopher Meiklejohn, Peter Van Roy, "Loquat: A Framework for Large-Scale Actor Communication on Edge Networks" *SmartEdge 2017*
- Borja Arnau de Régil Basáñez, Christopher Meiklejohn, "Dynamic Path Contraction for Distributed Dataflow Languages" *AGERE 2016*
- Seyed H. Haeri, Peter Van Roy, Carlos Baquero, Christopher Meiklejohn, "Worlds of Events: Deduction with Partial Knowledge about Causality" *ICE 2016*
- Paulo Viotti, Christopher Meiklejohn, Marko Vukolić, "Towards Property-Based Consistency Verification" *PaPoC '16*
- Christopher Meiklejohn, "Declarative, Secure, Convergent Edge Computation" *OBT '16* Christopher Meiklejohn, Seyed H. Haeri, Peter Van Roy, "Declarative, Sliding Window Aggregations for Computations at the Edge" *EdgeCom '16*
- Christopher Meiklejohn, Peter Van Roy, "Selective Hearing: An Approach To Distributed, Eventually Consistent, Edge Computation" W-PSDS '15
- Christopher Meiklejohn, Peter Van Roy, "The Implementation and Use of a Generic Dataflow Behaviour in Erlang" *Erlang '15*
- Christopher Meiklejohn, Peter Van Roy, "Lasp: a language for distributed, eventually consistent computations with CRDTs" *PaPoC '15*
- Christopher Meiklejohn, "Eventual Consistency and Deterministic Dataflow Programming: A Case Study of Integrating Derflow with the Riak Data Store." *LADIS '14*
- Manuel Bravo, Zhongmaio Li, Peter Van Roy, Christopher Meiklejohn, "Derflow: Distributed Deterministic Dataflow Programming for Erlang" *Erlang* '14
- Russell Brown, Sean Cribbs, Christopher Meiklejohn, Sam Elliott, "Riak DT Map: A Composable, Convergent Replicated Dictionary." *PaPEC '14*
- Christopher Meiklejohn, "On the composability of the Riak DT map: Expanding from embedded to multi-key structures." *PaPEC '14*
- Christopher Meiklejohn, "Riak PG: Distributed Process Groups on Dynamo-style Distributed Storage" *Erlang '13*

industrial experience

Consultant, Core Tech, Manticore, Adobe, 2018.

Consultant, Senior Systems Engineer, Veritas, 2017 - 2018.

Consultant, Distributed Systems, Comcast, 2016.

Independent Contractor, Distributed Systems, Mesosphere, 2016. Senior Software Engineer, Core Platform, Machine Zone, 2015 - 2016.

Senior Software Engineer, Basho Technologies, 2012 - 2015.

Software Engineer, Swipely, 2010 - 2012.

Web Programmer and Systems Administrator, Artists House Music, 2008 - 2009.

Software Engineering Manager, Berklee College of Music, 2008 - 2010.

Software Developer and Systems Engineer, Berklee College of Music, 2006 - 2008.

Senior Systems Engineer, Conversent Communications, 2000 - 2006.

Technical Support, IDS World Network, 1998 - 2000.

service

Program committee

SE-Config '19, PPDP '19, Erlang '19, PMLDC '17 (dair), PaPoC '17, PMLDC '16 (dair), Erlang '15, DEBS '15.

Curry On '15 - '19.

Google Summer of Code

BEAM Community '16

Teaching Assistant (UC Louvain)

Languages and algorithms for distributed applications. [LSINF2345 (Spring '17)]

Cloud Computing. [LINGI2145 (Fall '16)]

funding

MOBILITY Fellowship, Université catholique de Louvain, 2016.

awards Erasmu

Erasmus Mundus Joint Doctorate Fellowship, 2015.

summer schools Heidelberg Laureate Forum, 2016. PLISS '17, ECOOP '13, OPLSS '13.