KC Sivaramakrishnan

<http://kcsrk.info>

**Education**

* **PhD, Computer Science**, Purdue University, USA, May 2011 – Dec 2014

Thesis title: *“Functional Programming Abstractions for Weakly Consistent Systems”*

Advisor: Prof. Suresh Jagannathan

* **Master of Science, Computer Science**, Purdue University, USA, May 2008 – May 2011
* **Bachelor of Engineering, Computer Science and Engineering**, Anna University, India, Aug 2004 – May 2008

**Experience**

* **Research Fellow,** Royal Commission for the Exhibition of 1851, Oct 2015 – Present
* **Research Fellow,** Darwin College, Cambridge, Oct 2015 – Present
* **Research Associate,** Computer Laboratory, University of Cambridge, Dec 2014 – Present
* **Research Assistant,** Purdue University, Aug 2008 – Dec 2014
* **Research Intern,** Microsoft Research, Cambridge, Feb 2012 – May 2012
* **Research Intern,** Samsung Research America, May 2010 – Aug 2010

**Awards and Recognitions**

* **Research Fellowship**, Royal Commission for the Exhibition of 1851, 2015–2018, *£*102,000.
* **Research Fellowship**, Darwin College, Cambridge, 2015–2018, *£*900.
* **Maurice H. Halstead Memorial Award** for outstanding research in Software Engineering, Purdue University, 2014, $4,000.
* **Best paper award** at Many-core Architecture Research Symposium at RWTH-Aachen, 2012, $1,000.
* **Invited paper** in Science of Computer Programming, Vol. 78, Iss. 2 (Feb 2013).
* Glasgow Haskell Compiler (GHC) Committer.
* **SIGPLAN PAC travel grant** for PLDI 2012 and POPL 2014, $1,500 each.
* **NSF travel grant** for ICFP 2013, $2,000.

**Service**

* **Organizer**, Dagstuhl Seminar on *“Algebraic Effect Handlers go Mainstream”*, Apr 2018.
* **Convener**, Darwin College Science Seminar, Oct 2015 – Present.
* **Program Committee member:** PMLDC@ECOOP 2017, Off-the-beaten track (OBT) 2017, OCaml Workshop 2016,  SPLASH-MARC symposium, 2013
* **Artifact Evaluation Committee member**: PLDI 2015, PPoPP/CGO 2016.
* **Reviewer**: ECOOP, TODS, JFP, POPL, ICFP, ASPLOS, TLDI, Concurrency and Computation: Practice and Experience, Software: Practice and Experience.

**Journal Publications**

1. **KC Sivaramakrishnan**, Tim Harris, Simon Marlow, Simon Peyton Jones , *“Composable Scheduler Activations for Haskell”*, Journal of Functional Programming (JFP), Jun 2016
2. **KC Sivaramakrishnan**, Gowtham Kaki, Suresh Jagannathan, *“Representation without Taxation: A Uniform, Low-Overhead, and High-Level Interface to Eventually Consistent Key-Value Stores”*, IEEE Data Engineering Bulletin, 39(1): 52 64, Mar 2016
3. **KC Sivaramakrishnan**, Lukasz Ziarek, Suresh Jagannathan, *“MultiMLton: A Multicore-aware Runtime for Standard ML”*, Journal of Functional Programming (JFP), Nov 2014
4. **KC Sivaramakrishnan**, Mohammad Qudeisat, Lukasz Ziarek, Karthik Nagaraj, Patrick Eugster, *“Efficient Sessions”,* Science of Computer Programming (SCP), 78(2): 147 – 167, Feb 2013

**Conference Publications**

1. Daniel Hillerström, Sam Lindley, Robert Atkey, **KC Sivaramakrishnan**, *“Continuation Passing Style for Effect Handlers”*, International Conference on Formal Structures for Computation and Deduction (FSCD), 2017
2. Gowtham Kaki, **KC Sivaramakrishnan**, Thomas Gazagnaire, Anil Madhavapeddy, Suresh Jagannathan, *“DaLi: Database as a Library”,* The 2nd Annual Summit on Advances in Programming Languages (SNAPL), 2017 (Oral Presentation)
3. **KC Sivaramakrishnan**, Gowtham Kaki, Suresh Jagannathan, *“Declarative Programming over Eventually Consistent Data Stores”,* International Conference on Programming Language Design and Implementation (PLDI), 2015
4. **KC Sivaramakrishnan**, Lukasz Ziarek, Suresh Jagannathan, *“Rx-CML: A Prescription for Safely Relaxing Synchrony”,* Symposium on Practical Aspects of Declarative Languages (PADL), 2014
5. **KC Sivaramakrishnan**, Lukasz Ziarek, Suresh Jagannathan, *“A Coherent and Managed Runtime for ML on the SCC”*, Many-core Architecture Research Community Symposium (MARC), 2012
6. **KC Sivaramakrishnan**, Lukasz Ziarek, Suresh Jagannathan, *“Eliminating Read Barriers through Procrastination and Cleanliness”*, International Symposium on Memory Management (ISMM), 2012
7. Lukasz Ziarek, **KC Sivaramakrishnan**, Suresh Jagannathan, “[Composable Asynchronous Events](http://kcsrk.info/papers/acml_pldi11.pdf)”, International Conference on Programming Language Design and Implementation (PLDI), 2011
8. **KC Sivaramakrishnan**, Karthik Nagaraj, Lukasz Ziarek, Patrick Eugster, “[Efficient Session Type Guided Distributed Interaction](http://kcsrk.info/papers/sting_coordination10.pdf)”, International Conference on Coordination Models and Languages (COORDINATION), 2010
9. Lukasz Ziarek, **KC Sivaramakrishnan**, Suresh Jagannathan, *“*[*Partial Memoization of Concurrency and Communication*](http://kcsrk.info/papers/memo_icfp09.pdf)*”*, International Conference on Functional Programming (ICFP), 2009

**Selected Workshop Publications**

1. Stephen Dolan, **KC Sivaramakrishnan**, *“A Memory Model for Multicore OCaml”*, OCaml Workshop, Sep 2017
2. Gowtham Kaki, **KC Sivaramakrishnan**, Samodya Abeysiriwardane, Suresh Jagannathan, *“Mergeable Types”*, ML Workshop, Sep 2017
3. Stephen Dolan, Spiros Eliopolous, Daniel Hillerström, Anil Madhavapeddy, **KC Sivaramakrishnan**, Leo White, *“Effectively Tackling the Awkward Squad”*, Symposium on Trends in Functional Programming, Jun 2017
4. Oleg Kiselyov, **KC Sivaramakrishnan**, *“Eff directly in OCaml”*, ML Workshop, Sep 2016
5. Stephen Dolan, Leo White, **KC Sivaramakrishnan**, Jeremy Yallop and Anil Madhavapeddy, *“Effective Concurrency with Algebraic Effects”,* OCaml Worshop, 2015