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| KC Sivaramakrishnan  <http://kcsrk.info> | Assistant Professor  Department of Computer Science and Engineering  Indian Institute of Technology (IIT), Madras, India |

**Education**

* **PhD, Computer Science**, Purdue University, USA, Dec 2014

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

* **MS, Computer Science**, Purdue University, USA, May 2011
* **BE, Computer Science and Engineering**, Anna University, India, May 2008

**Employment**

* **Assistant Professor,** Department of Computer Science and Engineering, IIT Madras, Jan 2019 -
* **Senior Research Associate,** Computer Laboratory, University of Cambridge, Dec 2014 – Dec 2018
* **Research Fellow,** Royal Commission for the Exhibition of 1851, Oct 2015 – Present
* **Research Fellow,** Darwin College, Cambridge, Oct 2015 – 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.
* **Research Fellowship**, Darwin College, Cambridge, 2015–2018.
* **Maurice H. Halstead Memorial Award** for outstanding research in Software Engineering, Purdue University, 2014.
* **Best paper award** at Many-core Architecture Research Symposium, 2012.
* **SIGPLAN PAC travel grant** for PLDI 2012 and POPL 2014.
* **NSF travel grant** for ICFP 2013.
* **Member** of OCaml compiler core development team.
* Former **Member** of Glasgow Haskell Compiler (GHC) compiler development team.

**Service**

* **Editor,** Special Issue on the Theory and Practice of Algebraic Effects and Handlers, Journal of Functional Programming, 2019.
* **Organizer,** NIIShonan Meeting on “Programming Language support for Data-intensive Applications”, Jul 2019.
* **Organizer**, Dagstuhl Seminar on *“Algebraic Effect Handlers go Mainstream”*, Apr 2018.
* **Invited Expert,** NII Shonan Meeting on “Programming and Reasoning with Algebraic Effects and Handlers”, Mar 2019.
* **Invited Expert,** Dagstuhl Seminar on “Theory and Practice of Algebraic Effects and Handlers”, Apr 2016.
* **Convener**, Darwin College Science Seminar, Oct 2015 – Oct 2017.
* **Program Committee chair:** ML Workshop 2019
* **Program Committee member:** PMLDC@ECOOP 2017, Off-the-beaten track (OBT) 2017, OCaml Workshop 2016, SPLASH-MARC symposium, 2013
* **External Committee member:** ICFP 2019
* **Artifact Evaluation Committee member**: ICFP 2018, PLDI 2015, PPoPP/CGO 2016.
* **Reviewer**: LICS, ECOOP, TODS, JFP, POPL, ICFP, ASPLOS, TLDI, Concurrency and Computation: Practice and Experience, Software: Practice and Experience.

**Software**

* **Multicore OCaml** (github.com/ocamllabs/ocaml-multicore): Native support for concurrency and parallelism in OCaml
* **Quelea** (kcsrk.info/Quelea/)**:** Declarative programming over eventually consistent data stores
* **MultiMLton** (multimlton.cs.purdue.edu): MLton Standard ML compiler for exotic manycore architectures

**Relevant 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. Stephen Dolan, Spiros Eliopolous, Daniel Hillerström, Anil Madhavapeddy, **KC Sivaramakrishnan**, Leo White, *“Concurrent System Programming with Effect Handlers”*, Lecture Notes in Computer Science (LNCS): Trends in Functional Programming (TFP), 2018
3. Oleg Kiselyov, **KC Sivaramakrishnan**, *“Eff directly in OCaml”*, Electronic Proceedings in Theoretical Computer Science (EPTCS): ML Workshop, 2018
4. **KC Sivaramakrishnan**, Lukasz Ziarek, Suresh Jagannathan, *“MultiMLton: A Multicore-aware Runtime for Standard ML”*, Journal of Functional Programming (JFP), Nov 2014
5. **KC Sivaramakrishnan**, Mohammad Qudeisat, Lukasz Ziarek, Karthik Nagaraj, Patrick Eugster, *“Efficient Sessions”,* Science of Computer Programming (SCP), 78(2): 147 – 167, Feb 2013
6. Daniel Hillerström, Sam Lindley, **KC Sivaramakrishnan**, *“Compiling Links Effect Handlers to the OCaml Backend”,* ML Workshop, 2016
7. Stephen Dolan, Leo White, **KC Sivaramakrishnan**, Jeremy Yallop , Anil Madhavapeddy, *“Effective Concurrency with Algebraic Effects”,* OCaml Worshop, 2015
8. 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
9. **KC Sivaramakrishnan**, Lukasz Ziarek, Suresh Jagannathan, *“Rx-CML: A Prescription for Safely Relaxing Synchrony”,* Symposium on Practical Aspects of Declarative Languages (PADL), 2014
10. **KC Sivaramakrishnan**, Lukasz Ziarek, Suresh Jagannathan, *“A Coherent and Managed Runtime for ML on the SCC”*, Many-core Architecture Research Community Symposium (MARC), 2012
11. **KC Sivaramakrishnan**, Lukasz Ziarek, Suresh Jagannathan, *“Eliminating Read Barriers through Procrastination and Cleanliness”*, International Symposium on Memory Management (ISMM), 2012
12. 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
13. **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
14. Lukasz Ziarek, **KC Sivaramakrishnan**, Suresh Jagannathan, *“Partial Memoization of Concurrency and Communication”,* International Conference on Functional Programming (ICFP), 2009