ICFP 2009 Preliminary Program

Monday, August 31, 2009

Invited Talk
9:00  Organizing Functional Code for Parallel Execution, or, foldl and foldr Considered Slightly Harmful
      Guy L. Steele, Jr.; Sun Microsystems
10:00 Break

Session 1
10:25  La Tour D’Hanoï
      Ralf Hinze; University of Oxford
10:50  Purely Functional Lazy Non-deterministic Programming
      Sebastian Fischer¹, Oleg Kiselyov², Chung-chieh Shan³; ¹Christian-Albrechts University, ²FNMOC, ³Rutgers University
11:15 Break

Session 2
11:40  Safe Functional Reactive Programming through Dependent Types
      Neil Sculthorpe and Henrik Nilsson; University of Nottingham
12:05  Causal Commutative Arrows and Their Optimization
      Hai Liu, Eric Cheng, Paul Hudak; Yale University
12:30 Lunch break

Session 3
14:00  A Functional I/O System, Or, Fun for Freshman Kids
      Matthias Felleisen¹, Robert Bruce Findler², Matthew Flatt³, Shriram Krishnamurthi⁴; ¹Northeastern University, ²Northwestern University, ³University of Utah, ⁴Brown University
      Ryan Newton¹ and Teresa Ko²; ¹MIT CSAIL, ²UCLA Vision Lab
14:45  Runtime Support for Multicore Haskell
      Simon Marlow, Simon Peyton Jones, Satnam Singh; Microsoft Research
15:10 Break

Session 4
15:35  Effective Interactive Proofs for Higher-Order Imperative Programs
      Adam Chlipala, Gregory Malecha, Greg Morrisett, Avraham Shinnar, Ryan Wisnesky; Harvard University
16:00  Experience Report: seL4 – Formally Verifying a High-Performance Microkernel
      Gerwin Klein¹, Philip Derrin², Kevin Elphinstone¹; ¹NICTA & UNSW, ²NICTA
16:20  Biorthogonality, Step-Indexing and Compiler Correctness
      Nick Benton¹ and Chung-Kil Hur²; ¹Microsoft Research, ²University of Cambridge
16:45 Break

Session 5
17:10  Scribble: Closing the Book on Ad Hoc Documentation Tools
      Matthew Flatt¹, Eli Barzilay², Robert Bruce Findler³; ¹University of Utah, ²Northeastern University, ³Northwestern University
17:35  PC Chair’s Report
      Andrew Tolmach; Portland State University
17:55 Close
Tuesday, September 1, 2009

Invited Talk
9:00  Lambda, the Ultimate TA: Using a Proof Assistant to Teach Programming Language Foundations
      Benjamin Pierce; University of Pennsylvania
10:00 Break

Session 6
10:25  A Universe of Binding and Computation
      Daniel Licata and Robert Harper; Carnegie Mellon University
10:50  Non-Parametric Parametricity
      Georg Neis, Derek Dreyer, Andreas Rossberg; MPI-SWS
11:15 Break

Session 7
11:40  Finding Race Conditions in Erlang with QuickCheck and PULSE
      Koen Claessen¹, Michal Palka¹, Nicholas Smallbone¹, John Hughes², Hans Svensson², Thomas Arts², Ulf Wiger³; ¹Chalmers University of Technology, ²Chalmers University of Technology and Quviq AB, ³Erlang Training and Consulting
12:05  Partial Memoization of Concurrency and Communication
      Lukasz Ziarek, KC Sivaramakrishnan, Suresh Jagannathan; Purdue University
12:30 Lunch break

Session 8
14:00  Free Theorems Involving Type Constructor Classes
      Janis Voigtländer; Technische Universität Dresden
14:25  Experience Report: Haskell in the Real World
      Curt Sampson; Starling Software
14:45  Beautiful Differentiation
      Conal Elliott; LambdaPix
15:10 Break

Session 9
15:35  OXenstored: An Efficient Hierarchical and Transactional Database using Functional Programming with Reference Cell Comparisons
      Thomas Gazagnaire and Vincent Hanquez; Citrix Systems
16:00  Experience Report: Using Objective Caml to Develop Safety-critical Embedded Tool in a Certification Framework
      Bruno Pagano¹, Olivier Andrieu¹, Thomas Moniot¹, Benjamin Canou², Emmanuel Chailloux³, Philippe Wang¹, Pascal Manoury¹, Jean-Louis Colaço⁵; ¹Esterel-Technologies, ²LIP6 - PPS - UPMC, ³LIP6 - PPS - UPMC, ⁴PPS - UPMC, ⁵Prover Technology S.A.S
16:20  Identifying Query Incompatibilities with Evolving XML Schemas
      Pierre Genevès¹, Nabil Layaida², Vincent Quint²; ¹CNRS, ²INRIA
16:45 Break

Session 10
17:10  Report on the Twelfth ICFP Programming Contest
      Andy Gill; University of Kansas
17:55 Close
Wednesday, September 2, 2009

Invited Talk
9:00  Commutative Monads, Diagrams and Knots
     Dan Piponi
10:00 Break

Session 11
10:25 Generic Programming with Fixed Points for Mutually Recursive Datatypes
     Alexey Rodriguez¹, Stefan Holdermans¹, Andres Löh¹, Johan Jeuring²; ¹Utrecht University, ²Open University of the Netherlands
10:50 Attribute Grammars Fly First-Class: How to do Aspect Oriented Programming in Haskell
     Marcos Viera¹, S. Doaitse Swierstra², Wouter S. Swierstra³; ¹Instituto de Computacion Universidad de la Republica, Montevideo, ²Utrecht University, ³Chalmers, Gothenburg
11:15 Break

Session 12
11:40 Parallel Concurrent ML
     John Reppy¹, Claudio Russo², Yingqi Xiao¹; ¹University of Chicago, ²Microsoft Research
12:05 A Concurrent ML Library in Concurrent Haskell
     Avik Chaudhuri; University of Maryland, College Park
12:30 Lunch break

Session 13
14:00 Awards and Memorials
     In Memoriam Peter Landin; Most Influential ICFP’99 Paper Award; SIGPLAN Programming Languages Achievement Award (Rod Burstall)
     Pascal Cuq and Julien Signoles; CEA LIST
14:45 Control-Flow Analysis of Function Calls and Returns by Abstract Interpretation
     Jan Midtgaard¹ and Thomas P. Jensen²; ¹Roskilde University, ²CNRS
15:10 Break

Session 14
15:35 Automatically RESTful Web Applications Or, Marking Modular Serializable Continuations
     Jay McCarthy; Brigham Young University
16:00 Experience Report: Ocsigen, a Web Programming Framework
     Vincent Balat, Jéréôme Vuillon, Boris Yakobowski; Laboratoire Preuves, Programmes et Systèmes - Université Paris Diderot (Paris 7), CNRS
16:20 Implementing First-Class Polymorphic Delimited Continuations by a Type-Directed Selective CPS-Transform
     Tiark Rompf, Ingo Maier, Martin Odersky; EPFL
16:45 Break

Session 15
17:05 A Theory of Typed Coercions and its Applications
     Nikhil Swamy¹, Michael Hicks², Gavin Bierman¹; ¹Microsoft Research, ²University of Maryland, College Park
17:30 Complete and Decidable Type Inference for GADTs
     Tom Schrijvers¹, Simon Peyton Jones², Martin Sulzmann³, Dimitrios Vytiniotis²; ¹K.U.Leuven, ²Microsoft Research, ³Intaris Software GmbH
17:55 Close