LISP Pointers

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Dear Colleague,

The articles in this issue continue the topic started in the last Lisp Pointers (Volume IV, Number 3), the Revised[4] Report on the Algorithmic Language Scheme. You'll notice a change in our masthead. Barry Margolin will be taking over Patrick Dussud's column. Barry and the other department chairs are anxiously waiting to hear from you. Each day they go to their mailbox and search through the day's pile to see if anything is there yet. Please don't turn them into the Maytag Repair People. Our thanks to Patrick Dussud for his help and support of Lisp Pointers through the years.

JonL White appears in this newsletter under another guise, as Chair of the Lisp and Functional Programming Conference whose program you will find on page 29. And, courtesy of SIGPLAN, your next issue of Lisp Pointers will contain the proceedings from that conference. Now that's a clear indication of the value we've received by joining under the ACM umbrella.

Sincerely,

Mary S Van Deusen

Mary S. Van Deusen

CALL FOR PAPERS

1992 Lisp Users and Vendors Conference

The Second International Lisp User and Vendor Conference (LUV '92) will be held on August 10-14, 1992, at the U.S. Grant Hotel in San Diego, CA, and will be centered around the theme of "Delivering Business Success with Lisp". The conference is sponsored in part by the Association of Lisp Users.

The conference schedule includes two days of tutorials; a day of panel sessions, keynote addresses, technical paper presentations, and a student paper and application competition; a day of vendor presentations and demonstrations of new products; and more.

Papers submitted to the conference should focus on experience with practical applications of Lisp. The material must clearly demonstrate a practical value from the use of the Lisp language or Lisp technology; as such, papers need not be especially innovative nor original, but preference will be given to previously undisseminated reports and experiences. Topics in the area of programming languages and environments are welcome; but untested or purely theoretical ideas without a clear direction towards the theme of the conference would be less suitable.

Authors should submit 7 copies of their papers to the program chair at the address below. The length of the written papers should not exceed 10 pages (with font size at least 10-point or larger.) Accepted papers will appear in the written proceedings, which will be distributed at the conference. The authors of certain selected papers will be invited to make a 20-minute verbal presentation at the technical talks sessions during the conference. Time constraints will likely prevent the presentation of all accepted papers.

Submissions must be received by June 1, 1991. They should include a return postal address and a telephone number; an electronic mail address should also be included, if available. Authors will be notified of the acceptance or rejection of their papers by July 6, 1992. Corrections and alterations to the papers, if any, may be done up until July 24, 1992, which is the final date for receipt of a camera-ready copy.

Authors of accepted papers will be required to sign a release for publication in the conference proceedings. Authors may retain the copyright themselves if they wish by installing their own copyright notice in the paper. Previously copyrighted material may still be acceptable depending on the permission to publish; in this case, the previous copyright and notice of permission should appear in the paper.

Persons interested in the student competition should contact the student coordinator for submission requirements and further details. Both technical papers and descriptions of Lisp applications are valid entries. Submission and acceptance dates, as well as acceptable themes, are the same as for other authors.

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1992 ACM Conference on (...) Lisp and Functional Programming

Sponsored jointly by ACM SIGPLAN, SIGACT, and SIGART

Fairmont Hotel
San Francisco, California
June 22-24, 1992

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Watch SIGPLAN Notices for program and registration details

Advance Program for L&FP '92
1992 ACM Conference on Lisp and Functional Program

Session 1: 8:30–10:00, Monday

Improving Binding Times Without Explicit CPS-Conversion
Anders Bondorf

Safe Fusion of Functional Expressions
Wei-Ngan Chin

Compiling Lazy Pattern Matching
Luc Maranget

Session 2: 10:30–12:00, Monday

Caching Considerations for Generational Garbage Collection
Paul R. Wilson, Michael S. Lam, and Thomas G. Moher

Improving the Performance of SML Garbage Collection using Application-Specific Virtual Memory Management
Eric Cooper, Scott Nettles, Indira Subramanian

Polymorphic Type Reconstruction for Garbage Collection without Tags
Benjamin Goldberg and Michael Gloger

Session 3: 1:30–3:00, Monday

Projective ML
Didier Rémy

Parsers and Printers in ML
Michel Mauny and Daniel de Rauglaudre

Interactive Modular Programming in Scheme
Sho-Huan Simon Tung

Session 4: 3:30–5:30, Monday

Finiteness Conditions for Fixed Point Iteration
Flemming Nielson and Hanne Riis Nielson

A Syntactic Approach to Fixed Point Computation on Finite Domains
Tyng-Ruey Chuang and Benjamin Goldberg

Abstract Interpretation in Weak Powerdomains
Robert Muller and Yuli Zhou

A Precise Relationship Between the Deductive Power of Forward and Backward Strictness Analysis
Marc Neuberger

Session 5: 8:30–10:00, Tuesday

Proving Memory Management Invariants for a Language Based on Linear Logic
Jawahar Chirimar, Carl A. Gunter, and Jon G. Riecke

Proving the Correctness of Storage Representations
Mitchell Wand and Dino P. Oliva

On Extending Computational Adequacy by Data Abstraction
Val Breazu-Tannen and Ramesh Subrahmanyam

Session 6: 10:30–12:00, Tuesday

Parametric Type Classes
Kung Chen, Paul Hudak, and Martin Odersky

A Calculus for Overloaded Functions with Subtyping
Giuseppe Castagna, Giorgio Ghelli, and Giuseppe Longo

Type Inference in the Presence of Overloading, Subtyping, and Recursive Types
Stefan Kaes

Session 7: 1:30–3:00, Tuesday

Global Tagging Optimization by Type Inference
Fritz Henglein

Analysis of Structured Types in Lisp-like Languages
Edward Wang and Paul N. Hilfinger

Taming the Y Operator
Guillermo Juan Rozas

Session 8: 3:30–5:30, Tuesday

The Python Compiler for CMU Common Lisp
Robert A. MacLachlan

Integrating the Scheme and C Languages
Hans Muller and John R. Rose

WCL: Delivering Efficient Common Lisp Applications Under Unix
Wade Hennessey

Tachyon Common Lisp: An Efficient and Portable Implementation of CLtL2
Atsushi Nagasaka, Yoshihiro Shintani, Tanji Ito, Hiroshi Gomi, and Junichi Takahashi

Session 9: 8:30–10:30, Wednesday

A Confluent Calculus of Macro Expansion and Evaluation
Ana Bove and Laura Arbilla

Reasoning About Continuation-Passing Style Programs
Amr Sabry and Matthias Felleisen

Back to Direct Style II: First-Class Continuations
Olivier Danvy and Julia Lawall

Session 10: 11:00–12:30, Wednesday

Dynamic Program Parallelization
Lorenz Huelsbergen and James R. Larus

Global Analysis for Partitioning Non-Strict Programs into Sequential Threads
Kenneth R. Traub, David E. Culler, and Klaus E. Schauser

Fast Parallel Implementation of Lazy Languages — The EQUALS Experience
Owen Kaser, Shaunak Pawagi, C. R. Ramakrishnan, I. V. Ramakrishnan, and R. C. Sekar

A Foundation for an Efficient Multi-Threaded Scheme System
Suresh Jagannathan and Jim Philbin