

standard-output

**Guy L. Steele Jr.
October 1994**

Draft Common Lisp Standard Forwarded to X3 for Approval

The second public review for the draft proposed American National Standard for Programming Language Common Lisp ran from February 4, 1994 through April 5, 1994. Five public review comments were received, from Bob Boyer, Matt Kaufman, and J. Moore; Jeff Dalton; Kent Pitman; David Schulenburg; and Tom Shepard. X3J13 met on May 4-5, 1994, to discuss these comments, prepare responses, and approve changes to the draft standard.

Only editorial changes were required to address the public review comments. Therefore no further public reviews were required. The chair of X3J13 (yours truly) conducted a letter ballot from May 13 to June 13 to ask whether X3J13 was ready to forward the draft standard to X3 for final approval before submission to ANSI itself. There was one dissenting vote on this ballot, from Lucid, which raised further editorial issues to be addressed.

Technical committees are required to strive for consensus, especially on such a "final vote," so it was necessary to attempt to resolve this dissenting vote. After a great deal of E-mail discussion with all the members of X3J13, the chair (still yours truly) decided to conduct a letter ballot to decide these last editorial matters. This ballot ran from July 12 through August 12 and successfully resolved the remaining difficulties.

The editorially revised draft standard has been sent to X3 for approval, which requires a six-week letter ballot on their part. (Due process do grind slowly, don't it?) That letter ballot is slated to end October 26, and we breathlessly await the results as this column goes to press.

Kent Pitman Steps Up as X3J13 International Representative

Kent Pitman, X3J13 project editor, has been officially appointed International Representative for X3J13. In this capacity he will carry out the duties of project editor for SC22WG16.

IEEE/ANSI Scheme Standard Up for Reaffirmation

The Scheme standard was approved in late 1989 and published in 1990. Such standards must be reviewed every five years for continued applicability. Christopher Haynes tells me that the working group has informally indicated that reaffirmation of the standard, without revision, is in order; the formal balloting procedure is now in process.

Summer '95

S c h e m e W o r k s h o p s

In computer science education it is especially important that a programming language be simple and powerful. Simple -- so the mechanics of programming is not overly distracting, allowing students to experience the true joys and challenges of programming, from the very start. Powerful -- so students learn from the outset to use the best tools for mastering complex problems. The programming language Scheme is rapidly growing in popularity because it offers a unique combination of simplicity and power. More than 200 institutions are now using Scheme, from a number of high schools to most of the best known research universities.

Before adopting Scheme, an instructor should feel comfortable with the language and have a feel for the new instructional possibilities that Scheme enables. To this end Indiana University will offer in the Summer of 1995 the following two workshops of two weeks each, which may be taken individually or in succession.

INTRODUCING SCHEME: June 19th to 30th

This workshop provides an introduction to Scheme with special attention paid to the use of Scheme in introductory programming courses. Functional programming is introduced first, with emphasis on recursion and the use of procedures as first-class objects. Conceptual differences between the functional and imperative programming paradigms are highlighted when assignment is introduced. Graphics problems are provided for visual interest. A Scheme extension for object-oriented programming is introduced.

USING SCHEME TO UNDERSTAND PROGRAMMING LANGUAGES: July 3rd to 14th

Scheme enables some advanced courses to be approached in entirely new ways. To demonstrate this potential and develop skills in its use, this workshop presents a unique approach to the study of programming languages. Using Scheme as an executable meta-language enables a unified approach to teaching programming languages that spans the range from abstract semantics to implementation techniques. Every step is hands-on, using object-oriented interpreters that express the essential features of programming languages and techniques for their implementation. Prerequisite: the "Introducing Scheme" workshop or prior experience with Scheme.

SUPPORTING SOFTWARE AND EDUCATIONAL MATERIALS: Workshop participants will be introduced to software and educational materials designed to enhance Scheme-based instruction. Some of this software and material is being developed with the assistance of National Science Foundation Educational Infrastructure Grant CDA-9312614.

FORMAT: There will be about seven contact hours per day divided between lectures, with interactive display, and a laboratory, with individual computers and faculty assistance. On the mid-workshop Saturday, the schedule will be divided between instruction and an excursion. Sunday will be unstructured, with optional laboratory access.

ELIGIBILITY: All are welcome to apply. If necessitated by enrollment limitations, priority will be given to educators, and among them to minority and women applicants.

INSTRUCTORS: Professors Daniel P. Friedman, Christopher T. Haynes, and George Springer of Indiana University and Professor Richard M. Salter of Oberlin College. Collectively the instructors have almost 50 years of experience with Scheme as a tool in both teaching and research. They have authored three popular Scheme-based college textbooks and have taught Scheme in France, India, and Mexico and have presented Scheme tutorials at major conferences.

TUITION: \$100 per workshop, including materials.

MINORITY FELLOWSHIPS: To promote diversity among those at the forefront of computer science education, Indiana University is offering support for several minority fellowships covering the workshop fee, living expenses, and possibly transportation.

HOUSING: Single air-conditioned dormitory rooms are \$375 per workshop. Motel and guest-house recommendations will be provided on request. The university and town offer a variety of dining options, many within walking distance.

TRANSPORTATION: Bloomington is 50 miles south of the Indianapolis International Airport. Free workshop transportation will be offered at popular arrival and departure times.

APPLICATION: With appropriate access to the Web, you may apply via the HTML+ form <http://www.cs.indiana.edu/eip/application.html>. Otherwise, please fill in the following form and return it via one of these addresses:

Email: scheme-workshop@cs.indiana.edu
Fax: Scheme Workshop, 812-855-4829
Mail: Scheme Workshop, Lindley Hall, Bloomington, IN 47405.

If you have specific questions, please feel free to contact us via one of these addresses, or phone 812-855-3376.

The early application deadline is April 1st. Notification of acceptance will be given by April 15th. Tuition and housing payment is due May 15th.

SCHEME WORKSHOP APPLICATION

Name:

Position:

Affiliation:

Email address (if possible):

Mailing address:

Check as appropriate:

- applying for the "Introducing Scheme" workshop
- applying for the "Using Scheme to Understand Programming Languages" workshop
- dormitory accommodations desired
- have disability that requires accommodation

MINORITY FELLOWSHIP APPLICATION

If you wish to be considered for a minority fellowship, please supply a brief personal statement indicating your minority status, financial need, academic accomplishments (including degrees), and the use you would like to make of the knowledge gained in this workshop.

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