REPORT ON THE

FOURTH INTERNATIONAL WORKSHOP ON

SOFTWARE SPECIFICATION AND DESIGN

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The fourth International Workshop on Software Specification and Design was held April 3–4, 1987 in Monterey, CA. This series of workshops begun in 1982 by the Liaison Committee of Requirements Specification Techniques in Japan, with the main purpose of identifying major trends and key issues in the specification and design of software systems. These workshops have maintained a complementary link with the International Conference on Software Engineering which has enabled the participants to focus on issues of specification and design within the larger software engineering context provided by ICSE.

The fourth workshop started with invited talks by two distinguished invited speakers: Edward Yourdon, of Yourdon Inc, who talked about "the unification of software engineering paradigms", and Robert Balzar from the Information Sciences Institute, University of Southern California, who gave a multi–media presentation on "what we don't know how to specify". These talks were well recieved and inspired the workshop participants who then attended five working sessions, each lasted approximiately 1 1/2 hours.

Participation in the workshop was based on submitted papers and position papers. The workshop was organized into five working groups. The issues of formalism and formal methods were discussed by the **formalism** group, which was chaired by Dr. J. Woodcock from Oxford University. The **AI** group, under the chairmanship of Professor P. Freeman, University of California–Irvine, considered the impact and application of artificial intelligence. Environmental support, tools, techniques and methodologies were the major topics of discussion in the **methodology** group, chaired by Professor P. B. Henderson, SUNY at Stony Brook. An assessment of major approaches to software specification and design was considered by the **assessment** group, chaired by Dr. P. Zave, AT&T Bell Lab., Murray Hill. Professor R. Babb, Oregon Graduate Center, chired the **languages and models** group which discussed and evaluated specification and design languages and models. A summary of each working group's sessions follows this report.

To provide focus, we published a set of four problems from different domains (see Soft. Eng. Notes, 11(2), 1986) and asked all participants to study one or more of these problems. In addition to a discussion of these problem within each working group, a summary of the studies done by the authors of accepted papers for two of these problems was presented to the entire workshop. The proceedings of the workshop includes a toatal of 39 papers which were judged by the program committee to best represent the state of the art, major concerns and the emerging trends of the domain of software specification and design (IEEE Catalog# TH0181–8).

The next International Workshop on Software Specification and Design will be held in conjunction with ICSE 11 in Pittsburgh, 1987.