### A Second Conference on Software Development Tools, Techniques, and Alternatives

**MONDAY, DECEMBER 2, 1985**

9:00 A.M. - 5:00 P.M.

**PRE-CONFERENCE TUTORIALS**

**TUESDAY, DECEMBER 3, 1985**

9:00 A.M. - 10:15 A.M.

**OPENING SESSION**

Marvin V. Zelkowitz, General Chairman and Session Chairman
University of Maryland

**TOOLS FOR A FUTURE SOFTWARE FACTORY**

**DR. JOHN H. MANLEY**

Director, Software Engineering Institute
Carnegie-Mellon University

10:15 A.M. - 10:30 A.M. **BREAK**

10:30 A.M. - 12:00 Noon

**SESSION 1A—LARGE SYSTEMS ENVIRONMENTS**

An Environment for Large Software Systems, W. Scacchi and K. Nazyanaswamy, Univ. Southern Calif.

**WEDNESDAY, DECEMBER 4, 1985**

9:00 A.M. - 10:00 A.M.

**FEATURED SPEAKER**

SOFTWARE METHODOLOGY AND TOOLS

**DR. HARLAN D. MILLS**

IBM Federal Systems Division

10:00 A.M. - 10:30 A.M. **BREAK**

10:30 A.M. - 12:00 Noon

**SESSION 4A—APPLICATION GENERATORS**

GEM: A Generator of Environments for Metaprogramming, K. Lieberherr and A. Goldberg, GTE Labs, Inc.

ES/AG: System Generation Environment for Intelligent Application Software, R. Cronk and D. Zelinski, AT&T Bell Labs

GIBBSGEN: Code Generation for GIBBS, D. Bergmark, Cornell Univ.

### SESSION 1B—STRUCTURAL TESTING

Session Chairman: John D. Gannon, Univ. MD

A Tool for Data Flow Oriented Program Testing, B. Korel and J. Laski, Oakland Univ.

A Computer System for Generating Test Data Using the Domain Strategy, L. White, P. Sahay, Univ. Alberta

A Data-Flow Testing Tool, P. Franki and E. Weyuker, New York Univ.

12:00 Noon - 2:00 P.M. **TOOLS DEMO/LUNCH**

2:00 P.M. - 3:30 P.M.

**SESSION 2A—KNOWLEDGE ENGINEERING APPLICATIONS**

A Meta System for Generating Software Engineering Environments, J. Ramanathan, Ohio State Univ., W. McKnight, USAF

A Knowledge Based Design Aid for Software Systems, M. Harandi and M. Lubars, Univ. IL-Urbana

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**SESSION 2B—PANEL—PC-BASED TOOLS**

Speakers TBA

3:30 P.M. - 3:45 P.M. **BREAK**

3:45 P.M. - 5:15 P.M.

**SESSION 3—ADA TOOLS**

Larry Druffel, Rational

Other Speakers TBA

**SESSION 4B—FUNCTIONAL TESTING**

Session Chairman: Richard G. Hamlet

Reproducible Testing of Concurrent Program, K. Tai, N.C. Univ.

Auto Parts—A Tool to Aid in Equivalence Partition Testing, D. Sois, Mirror Systems, Inc.

A Test Oracle Based on Formal Specifications, J. Day, IBM Corp., and J. Gannon, Univ. MD

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2:00 P.M. - 3:30 P.M.

**SESSION 5A—DESIGN CONCEPTS**

Applying Database Techniques to the Management of Program Module Descriptions, R. Marti, Sun Microsystems, Inc.

A Tool for Prototyping, B. Friman, Royal Inst. of Tech.

A Software Tool and a Schematic Notation That Improve the Use of Programming Languages, P. Robillard, Ecole Polytechnique
SESSION 5B—PANEL—FUTURE FOR TOOLS
Richard G. Hamlet, Oregon Grad. Ctr.
Tony Wasserman, Univ. Calif.-SF
Others, TBA
3:30 P.M. - 3:45 P.M. BREAK
3:45 P.M. - 5:15 P.M.
SESSION 6B—FORMAL ANALYSIS
Tools for Efficient Analysis of Concurrent Software Systems,
R. Razouk and D. Hirschberg, Univ. Calif.-Irvine
Tree-Oriented Interactive Processing with an Application to
Theorem-Proving, D. Hammerslag, S. Kamin, and R. Campbell,
Univ. III.-Urbana-Champaign
Formal Specification of Syntax Directed Editor, E. Havnnberg and
M. Krishnamoorthy, Rensselaer Poly. Inst.

THURSDAY, DECEMBER 5, 1985
9:00 A.M. - 10:30 A.M.
SESSION 7—TOOLS IN USE
Current State of the SARA/IDEAS Design Environment,
E. Krell and E. Lor, Univ. Calif.-LA
Artificial Intelligence Tools
Speaker TBA
10:30 A.M. - 11:00 A.M. BREAK
11:00 A.M. - 12:30 P.M.
SESSION 8—ENVIRONMENTAL ISSUES
Integrating Software Development: Estimation, Planning,
Scheduling, and Tracking: The PLANMACS System, H. Rubin,
CUNY, D. von Kleeck, Mgmt. & Comp. Serv., Valley Forge, PA,
D. Bartz, Bartz Consultants, Irvington, NY
Supporting Parallel Development Within a Software Engineering
Environment, R. Houghton, Duke Univ.

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