# Thomas A. Standish

### **Presentations**

### Presentations in 1991-96

- O(n) Sorting, O(1) Searching, and O(1) Dynamic Memory Allocation, Computer Science Theory Group Talk, Dept. of Information and Computer Science, UC Irvine, June 7, 1996.
- The Role of Scientific Visualization in the Education of Students of Computer Science, Panel at IFIP Working Group 3.2 Conference on Visualization in Scientific Computing: Uses in University Education, UC Irvine, July 30, 1993.
- *Informality and the Epistemology of Computer Programming,* Workshop on Informal Computing, Sponsored by DARPA ISTO, Scotts Valley, California, May 30, 1991.

### **Presentations in 1990**

- Technology and Teaching Context and Issues, Invited Keynote Address, 1990 Instructional Improvement/ Educational Technology Conference, organized by the University of California Office of the President, UC Davis, May 2.
- Using Simulation, Animation, and Exploratory Environments to Help Teach Computer Science Fundamentals, Harvey Mudd College, Claremont, California, (Live Macintosh Demonstration), March 29.
- Using Simulation, Animation, and Exploratory Environments to Help Teach Computer Science Fundamentals, Software Engineering Institute, Carnegie-Mellon University, Pittsburgh, Pennsylvania, (Live Macintosh Demonstration), February 21.

- Can Computers Help Revitalize Education?, Invited Faculty Address, UCI Honors Convocation, June 13.
- How Will We Utilize New Technology in Providing Education in the Future?, Invited Presentation, UCI Faculty Retreat, Rancho Santa Fe, (live Macintosh demonstration), May 31.
- Can Computers Help Revitalize Education?, Invited Address to Honors Students, Computer Science Night, UC Davis, (Live Macintosh Demonstration), May 22.
- Can Computers Help Revitalize Computer Science Education?, Brown Bag Lunch, UCI, ICS Department, (live Macintosh demonstration), May 14.

- Computers in the School of the Future, California Principal's Conference for Academic Excellence in Effective Schools, Anaheim, Ca, (live Macintosh demonstration), Nov. 22.
- Macintosh Future Directions, ACM Meeting, UC Irvine, (live Macintosh demonstration), February 8.

- Arcturus and Advanced Programming Environments of the Future, UC Computer Center Consultant's Conference, UC Irvine, December 13.
- *Microcomputer Laboratories*, Panel at the Conference on Microcomputers in Higher Education, de Anza College, Cupertino, California, October 20.
- Visions of Future Environments, (with Larry Druffel, Warren Teitelman, and Cordell Green), Panel at 1984 ACM Annual Conference, San Francisco, October 9.
- *User Interfaces Report of Working Group 6*, ACM AdaTEC Future Ada Environment Workshop, Santa Barbara, California, September 20.
- *Beyond Stoneman*, Invited Presentation, ACM AdaTEC Future Ada Environment Workshop, Santa Barbara, California, September 18.
- Interactive Ada in the Arcturus Environment, Microelectronics Research and Development Center, Rockwell International, Anaheim, California, May 11.
- *Interactive Ada in the Arcturus Environment,* Computer Science Colloquium, Harvard University, Cambridge, Massachusetts, February 17.
- *The Epistemology of Computer Programming,* Computer Science Colloquium, Yale University, New Haven, Connecticut, February 15.
- The Epistemology of Computer Programming, National AdaTEC Meeting, San Diego, California, February 9.
- Teaching Ada using the Arcturus Interactive Ada System, Ada Education Subcommittee, National AdaTEC Meeting, San Diego, California, February 7.
- Rapid Prototyping in Arcturus, Ada Professional Development Seminar, AdaTEC Los Angeles Chapter, El Segundo, California, January 28.

Arcturus - How it Works, and Rapid Prototyping in Arcturus, two talks at the IBM Federal Systems Division, Bethesda, Maryland, January 9.

- Software Reuse, Workshop on Reusability in Programming, ITT, Newport, Rhode Island, September 7.
- *Interactive Ada in the Arcturus Environment,* Boston AdaTEC Meeting, Cambridge, Massachusetts, July 7.
- Fast Composition and Debugging via an Interactive Ada System, AIAA Conference on Using Ada, Washington, D.C, June 29.
- *Interactive Ada Environments of the Future,* National Computer Conference, Anaheim, California, May 18.
- New Horizons in Computer Programming, UCI Honors Day Program, UC Irvine, May 1.
- *Live Demonstration of Arcturus*, for Norden Systems and Ford Aerospace, Programming Environment Project, UC Irvine, March 21.
- Rapid Prototyping in the Arcturus Environment, ACM National AdaTEC Meeting, San Diego, California, February 24.
- Arcturus An Advanced Interactive Programming Environment, Colloquium, ICS Department, UC Irvine, Februrary 23.
- The Epistemology of Computer Programming, Cognitive Sciences Seminar, UC Irvine, February 9.
- The Irvine Programming Environment Project What do We Do?, dinner presentation for parents and spouses, Programming Environment Project, UC Irvine, February 3.
- The Irvine Programming Environment Project What do We Do?, luncheon presentation for ICS Departmental Staff, Programming Environment Project, UC Irvine, February 2.
- Programming Environments of the Future, Japanese Software Industry Association, Tokyo, Japan, January 14.
- How Arcturus Works, Joint System Development Corporation, Tokyo, Japan, January 13.
- Rapid Prototyping in Arcturus, 16th International Hawaii Conf. on System Sciences,

- Programming Environments of the Future, Science Research Associates Seminar, Santa Monica, California, December 9.
- Ada Programming in the Future: The UC Irvine Arcturus Environment, Arrowhead AdaTEC Meeting, Claremont, California, December 1.
- Ada Programming in the Future: The UC Irvine Arcturus Environment, San Diego AdaTEC Meeting, San Diego, California, November 11.
- *Interactive Tools for Program Design,* Ada Education and Technology Transfer Symposium, Crystal City, Virginia, October 9.
- Ada Programming in the Future: The UC Irvine Arcturus Environment, Los Angeles AdaTEC Meeting, Redondo Beach, California, September 20.
- A Philosophy for a Tool Extension Paradigm, Oxnard Workshop on Ada Programming Environments of the Future, Oxnard, California, August 12.
- New Category Extensibility, KITIA Meeting, Waltham, Mass, June 18.
- The Importance of Ada Programming Support Environments, National Computer Conference, Houston, Texas, June 9.
- Initial Thoughts on Rapid Prototyping Techniques, ACM SIGSOFT Second Software Engineering Symposium: Workshop on Rapid Prototyping, Columbia, Maryland, April 20.

- Ada Programming Environment Research, Rockwell International, Newport Beach, California, December 17.
- *Program Understanding Techniques*, DARPA Conference on Program Visualization, Key West, Florida, December 15.
- *Programming Environments of the Future,* Xerox Council of Research Fellows, XEROX PARC, Palo Alto, Calif, November 17.
- The Arcturus Personal Workstation, panel on Mini/Micro-Based Software Engineering Environments, 5th International Conference on Software Engineering,

- San Diego, California, March 11.
- Programming Environments of the Future, TRW Software Systems Operations Seminar, TRW, Redondo Beach, California, February 18.
- Programming Environments of the Future, Computer Science Colloquium, ICS Dept., UC Irvine, February 4.
- Programming Environments of the Future, Aerospace Computer Resources Forum, The Aerospace Corporation, El Segundo, California, January 16.

- Problems and Research Directions in Programming Environments, 4th International Computer Software and Applications Conference, IEEE, Chicago, October 29.
- Arcturus: An Advanced, Highly-Integrated Programming Environment, Symposium on Software Engineering Environments, Lahnstein, Germany, June 17.
- What is Computer Science?, Santa Ana College, Santa Ana, California, April 26.
- Programming Environments, Computer Science Colloquium, University of San Francisco, April 10.
- The Impact of Ada on the Software Metrics Problem, Software Metrics Workshop, Las Vegas, Nevada, January 31.

#### Presentations in 1979

Transformation Techniques: Constructive or Destructive?, Panel Discussion with E.W. Dijkstra, D. Gries, R.M. Burstall, B. Randell, and P.Pepper, 4th International Conf. on Software Engineering, Munich, Germany, September 18.

- Fast-Fit: A New Dynamic Memory Allocation Technique, Computer Science Seminar, Univ. of Southern California, Los Angeles, California, November 1.
- The Future of Automatic Programming, presentation during Panel Discussion on Whither Automatic Programming, with C.C. Green, E. Kant, M. Hammer, R. Balzer, NCC 1978, Anaheim, California, June 7.
- Program Transformations, Computer Science Colloquium, Jorgensen Lab.,

California Institute of Technology, Pasadena, California, May 14.

### **Presentations in 1977**

*Arcturus,* Information Sciences Institute, University of Southern California, Marina del Rey, CA, July 15.

### **Presentations in 1976**

- What is Computer Science?, Information and Computer Science Department Annual Lecture, University of California, Irvine, September 25.
- Refining and Improving Programs with Source-to-Source Transformations,
  Computer Science Colloquium, Dept. of Applied Mathematics, Harvard University,
  Cambridge, MA, June 22.
- *Improving and Refining Programs by Program Manipulations,* Colloquium, Computer Science Department, University of Utah, Salt Lake City, Utah, May 18.
- Semi-Automatic Programming Using Source-to-Source Transformations, ACM Computer Science Conference, Anaheim, CA., February 11.

#### Presentations in 1975

- What Do Computer Scientists Do?, Mathematics Colloquium, Department of Mathematics, U. C. Riverside, Riverside, CA, December 3.
- Semi-Automatic Programming Using Mechanized Refinement Transformations, SIGPLAN, L. A. Chapter, Santa Monica, CA.
- Extensibility in Programming Language Design, National Computer Conference, AFIPS, Anaheim, CA, May 20.
- Programming Languages for Intelligent Terminals, Conference on Computer Graphics, Pattern Recognition and Data Structure, Beverly Hills, CA, May 14.

- Extensible Languages An Anatomy of a Failure, ACM National Meeting, SIGPLAN Lecturer, San Diego, CA, November 11.
- Data Structures An Axiomatic Approach, University of California, Irvine, April 8.

Extensible Languages - An Anatomy of a Failure, University of California, Irvine, April 5.

Observations and Hypotheses About Program Synthesis Mechanisms, Computer Science Seminar, Softech Inc., Waltham, MA, January 3.

#### **Presentations in 1973**

Representation Cascades, Heterarchy and Knowledge Structures in Automatic Programming, Yale University, October 29.

APL Implementation Techniques, Harvard University, October 23.

Representation Cascades, Heterarchy and Knowledge Structures in Automatic Programming, Brandeis University, October 16.

Data Structures — An Axiomatic Approach, Brown University, October 9.

New Trends in Programming Languages, Computer Science Seminar, Bolt Beranek and Newman, July 12.

Automatic Program Synthesis Techniques, Brown University, June 27.

#### **Presentations in 1972**

*The Air Traffic Control System* — *Present and Future,* Computer Graphics Seminar, Harvard University, December 13.

Extensible Languages — An Anatomy of a Failure, ACM SIGPLAN, Boston Chapter Meeting, Brandeis University, December 7.

Extensible Languages — An Anatomy of a Failure, Queen's University, Kingston, Ontario, Canada, October 19.

On the Limitations of Our Current Stock of Ideas About Extensible Languages, Courant Institute of Mathematical Sciences, New York University, May 5.

A Comparison of PPL and APL, Computer Science Colloquium, Yale University, April 11.

- After Extensible Languages, What Next?, Princeton Conference on Information Sciences and Systems, Princeton University, March 25.
- After Extensible Languages, What Next?, Brown University, March 17.
- A Live Demonstration of PPL, Johns Hopkins University, March 1.
- Axioms for Data Structures, SIGPLAN Symposium on Data Structures in Programming Languages, Gainsville, FL, February 26.
- A Live Demonstration of PPL, Yale University, February 22.
- A Live Demonstration of PPL, Carnegie-Mellon University, February 4.

- The Enroute Air Traffic Control System Present and Future, Air Traffic Control Seminar, Transportation Systems Center, Cambridge, MA, December 10.
- Control Structures for Programming Languages, The Mitre Corporation, Bedford, MA, October 14.
- The Enroute Air Traffic Control System Present and Future, Computer Science Seminar, Bolt Beranek and Newman, February 25.

- The Enroute Air Traffic Control System Present and Future,
  MIT Project MAC Seminar on Computation Structures, December 11.
- The Role of Extensible Languages in a Network of Computers, Workshop on Networks of Computers, University of Maryland, College Park, October 21.
- Some Features of PPL, A Polymorphic Programming Language, SIGPLAN Extensible Languages Symposium, Boston, MA, May 13.
- The Enroute Air Traffic Control System Present and Future, University of Utah, February 28.
- A Polymorphic Programming Language, California Institute of Technology, Information Sciences Seminar, February 26.

- A Polymorphic Programming Language, MIT Project MAC-Seminar on Computation Structures, December 19.
- A Polymorphic Programming Language, Working Conference on Extensible Languages, Carnegie-Mellon University, December 3.
- A Polymorphic Programming Language, University of Waterloo, Waterloo, Ontario, Canada, November 11.
- Data Definition Techniques, Joint Chiefs of Staff, Pentagon, given with A.J. Perlis, October 14.
- Conferencias Sobre Analisis Sintactico, (in Spanish), National University of Mexico, Visting Lecturer Series, July 18.
- Polymorphic Programming, National Security Agency, Ft. Meade, MD, April 22.

### Presentations in 1967

- Formula Algol, Computer Science Colloquium, Cornell University, October 13.
- Data Definition Facility for Programming Languages, Computer Science Colloquium, Cornell University, October 12.
- A Data Definition Facility for Programming Languages, IBM Poughkeepsie Laboratories, July 24.
- A Data Definition Facility for Programming Languages, IBM Watson Research Center, Yorktown Heights, July 24.
- A Data Definition Facility for Programming Languages, Applied Math. Colloquium, Harvard University, January 21.

- Formula Algol, Computer Science Colloquium, University of Wisconsin, Madison, December 21.
- A Data Definition Facility for Programming Languages, Computer Science Colloquium, The Pennsylvania State University, University Park, October 21.
- How it Feels to Compute in Carnegie Tech's Remote Job Entry System, NATO Conference

- on Man-Machine Interaction, Edinburgh, Scotland, August 4.
- Programming Language Design Criteria and Trade-Offs, Computer Science Colloquium, University of Texas, Austin, TX, May 3.
- A Formal Semantic Language of Feldman and Its Use in Compiler Writing, Computer Science Colloquium, University of Texas, Austin, May 2.
- A Definition of Formula Algol, Symposium on Symbolic and Algebraic Manipulation, Washington, D. C., given with R. Iturriaga, April 29.
- Techniques and Advantages of Using the Formal Compiler Writing System FSL to Implement a Formula Algol Compiler, Spring Joint Computer Conference, Boston, given with R. Iturriaga, April 20.

Formula Algol, Computer Science Colloquium, Stanford University, September 25.