TUTORIAL

A tutorial on the Ada language will be conducted on October 4-5. Major language features will be thoroughly explained and illustrated with carefully chosen examples. The motivation for the language design will also be presented together with a concise summary of the language changes from July 1980 Ada to ANSI Ada. (It is expected that Ada will become an ANSI standard this summer.) This tutorial will most probably be the first exposition of this revision to the language.

The tutorial should be especially useful for software developers requiring an understanding of the design principles and major facilities of the Ada language. Attendees should have some prior knowledge of Ada.

Dr. Gerald Fisher (NYU) and Dr. Benjamin Brosgol (Intermetrics) will conduct the tutorial. Both have been extensively involved in the development of Ada as Distinguished Reviewers and as implementors.

Gerald A. Fisher
Senior research scientist, NYU; director of NYU Ada Project; coauthor of NYU Ada/ED translator and interpreter; developer of improved techniques for practical syntaxic error recovery; lecturer on Ada in industry and academia; Ada Distinguished Reviewer; founder of Ada Implementors Group; chairman of AdaTEC.

Benjamin M. Brosgol
Senior staff member, Intermetrics Inc.; manager and design team member, “Red” Language Project; Ada Distinguished Reviewer; design team member TCOL/Ada and Diana intermediate languages; manager and design team member, retargetable back end of Air Force Ada compiler; chairman of AdaTEC Implementation Subcommittee.

MONDAY, OCTOBER 4, 1982

Morning:
- Background
- Language Overview
- Types and Declarations — basic topics
- Statements and Expressions

Afternoon:
- Subprograms
- Packages and Visibility
- Exception Handling
- Types and Declarations — advanced topics (derived types, numerics)

TUESDAY, OCTOBER 5, 1982

Morning:
- Separate Compilation
- Tasks
- Generics
- Input/Output

Afternoon:
- Low-level Facilities
- Changes Since Ada '80
- Ada Environments
- Summary and Current Ada Activities

CONFERENCE

WEDNESDAY, OCTOBER 6, 1982

Opening Session: 9:00 - 10:30 AM
Welcoming Remarks: Anthony B. Gargaro (CSC)
Invited Speaker: William A. Wulf (Tartan Laboratories)
Coffee: 10:30 - 11:00 AM

Tasking and Runtime Systems: 11:00 AM - 12:30 PM
Chaired by: John C. Knight (U. of Virginia)
Design and Implementation in Ada of a Runtime Task Supervisor
E. Falis (Stanford U.)
Monitoring for Deadlocks in Ada Tasking
S. German (Harvard U.), D. Heimbold, and D. Luckham (Stanford U.)
Implementation Strategies for Ada Tasking Idioms
P. Hilfinger (Carnegie-Mellon U.)
Luncheon: 12:30 - 2:00 PM

KAPSE Issues: 2:00 - 3:00 PM
Chaired by: Ronald F. Brender (Digital Equipment Corporation)
The KAPSE for the Ada Language System
R. Thal (SoTec)
Portable Ada Programming System: A Proposed Run-Time Architecture
A. Fanetti (Olivetti)
ADABASE: A Data Base for Ada Programs
W. Tichy (Purdue U.)
Coffee: 3:30 - 4:00 PM

Education: 4:00 - 5:30 PM
Chaired by: Peter W. Wegner (Brown U.)
A Methodology for Programming Abstract Data Types in Ada
M. Sherman, A. Hisgen, and J. Rosenberg (Carnegie-Mellon U.)
An Annotated Example of a Design in Ada
J. Privitera (Ford Aerospace and Communications Corp.)
On the Suitability of Ada Multitasking for Expressing Parallel Algorithms
S. Yemini (Courant Institute of Mathematical Sciences)

Birds of a Feather: 8:00 - 10:00 PM

THURSDAY, OCTOBER 7, 1982

Invited Speaker: 8:30 - 9:00 AM
Jean D. Ichbiah (Alsys)

Compiler Front Ends: 9:00 - 10:30 AM
Chaired by: William A. Whittaker (USAFA)
The ALS Ada Compiler Front End Architecture
P. Simpson (SoTec)
An Efficient Method of Handling Operator Overloading in Ada
E. Schonberg and G. Fisher (New York U.)
On the Access-Before-Elaboration Problem in Ada
P. Belmont (Intermetrics)
Coffee: 10:30 - 11:00 AM

Formalism: 11:00 AM - 12:30 PM
Chaired by: David C. Luckham (Stanford U.)
Testing the INRIA Ada Formal Definition: The USC-ISI Formal Semantics Project
V. Kini, D. Martin, and A. Stoughton (USC-Information Sciences Institute)
Rendezvous with Ada - A Proof Theoretical View
A. Pruili (The Weizmann Institute of Science and W. DeRoever (U. of Utrecht)
An Operational Semantics of Tasking and Exception Handling in Ada
W. Li (U. of Edinburgh)
Lunch: 12:30 - 2:00 PM
Invited Speaker: Robert B. K. Dewar (New York U.)

Applications: 2:00 - 3:30 PM
Chaired by: John B. Goodenough (SoTec)
Using Ada for Industrial Embedded Microprocessor Applications, II
A. Duncan and J. Hutchison (GE Research & Development Center)
The Integration of Existing Database Systems in an Ada Environment
M. Bever, M. Dausmann, S. Drossopoulou, W. Kirchgoessner, P. Lockemann, G. Persch, and G. Winterstein (Universität Karlsruhe)
An Ada Package for Discrete Event Simulation
G. Bruno (Instituto di Elettrotecnica Generale, Politecnico di Torino)
Coffee: 3:30 - 4:00 PM

KAPSE Interface Team Panel: 4:00 - 5:30 PM
Chaired by: Patricia A. Oberndorf (NOSC)
Birds of a Feather: 8:00 - 10:00 PM

FRIDAY, OCTOBER 8, 1982

Invited Speaker: 8:30 - 9:00 AM
Larry E. Druffel (Ada Joint Program Office)
Tools: 9:00 - 10:30 AM
Chaired by: David B. Loveman (Massachusetts Computer Associates)
A Command Language for the Ada Environment
M. Krcac (Intermetrics)
Abstract Syntax Based Programming Environments
D. LeBlang (Digital Equipment Corporation)
Linkage of Ada Components — Theme & Variation
G. Frankel and R. Arnold (TeleSoft)
Coffee: 10:30 - 11:00 AM

*Ada is a registered trademark of the Department of Defense*
CONFERENCE INFORMATION

LOCATION: All tutorial and conference activity will be at the Hyatt Regency Crystal City, 2799 Jefferson Davis Highway, Arlington, Virginia 22202; telephone (703) 486-1234.

TRANSPORTATION: The Hyatt Regency Crystal City is immediately adjacent to Washington National Airport, just blocks from the Metro (Washington’s subway system). The hotel provides complimentary shuttle service to and from Washington National Airport and Metro. In addition, complimentary parking will be provided for conference attendees registered at the hotel.

CLIMATE: Average temperatures in Washington in October range from a daytime high of 70°F to an evening low of 50°F.

ACCOMMODATIONS: A block of rooms has been reserved at the Hyatt Regency Crystal City for attendees. These rooms will be released after 4 September 1982 and will be available on a first-come first-served basis. Make your room reservations using the attached form. When making reservations by phone, mention the AdaTEC Conference to get the reduced rate.

REGISTRATION FEE: The registration fee for the tutorial includes one copy of the tutorial materials, two luncheons, and refreshments during breaks. The conference registration fee includes a copy of the proceedings, three luncheons, and refreshments during breaks. The student registration includes everything except the conference proceedings and luncheons. Because of limited facilities, preregistration is strongly recommended.

FURTHER INFORMATION: Contact the conference chairman:
Anthony Gargaro
Computer Sciences Corporation
304 West Route 38
Moorestown, New Jersey 08057
(609) 234-1100 ext. 2280

ADVANCE REGISTRATION FORM

Please use this form or facsimile to preregister. Due to limited facilities, advance registration is recommended. Registration forms will be processed in the order of receipt. Advance registration closes Monday, 13 September 1982. Please mail form with check made payable to ACM AdaTEC Tutorial and Conference on Ada to:

Ada'82 Registration
c/o Raymond P. Young
1180 Timbershore Lane
Eagan, Minnesota 55123

Member of ACM and AdaTEC Conference & Tutorial Only (a, b)

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<tr>
<th>Type of Room</th>
<th>No. of Rooms</th>
<th>Convention Rates</th>
<th><em>Regency Club</em></th>
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<tr>
<td>Single (1 person)</td>
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The above rates are subject to state and local taxes.

If all rooms in the requested rate category are already reserved, the next available rate will be assigned. *Regency Club accommodations include special guest room amenities and special food and beverage services.

HOTEL RESERVATION FORM

Date of Arrival __________
I will arrive via __________
Time of Arrival __________
Date of Departure __________
Check in Time: 3 p.m.
Check out Time: 12 Noon
Name __________
Address __________
Telephone No. __________
Sharing room with __________

Reservations must be received by 9/4/82. Your reservation will be held until 6 p.m. unless one night’s deposit is received or guaranteed by credit card below. Failure to cancel 24 hours prior to arrival will result in 1 night’s charges billed to your credit card.

Deposit of $__________
American Express # __________
Diners Club # __________
Carte Blanche # __________
Master Card # __________
Visa # __________
Expiration Date __________
Signature __________