CALL FOR PARTICIPATION
ISOTAS '96

JSSST International Symposium Series

2nd International Symposium on
Object Technologies for Advanced Software

Kanazawa, Japan, March 11-15, 1996

Sponsored by: Japan Society of Software Science and Technology (JSSST), Japan Advanced Institute of Science and Technology (JAIST)

In cooperation with: ACM, IEEE Computer Society*, IEICE, IPSJ *(*requesting)*

AIMS and GOALS

Object technologies are attracting ever increasing attentions in various areas of research and development for advanced software:

- Object-Oriented Programming (OOP) reduces the complexity of large-scale software development through inheritance/encapsulation/class libraries/framework. OOP also serves as a basis of new generations of programming languages in concurrent and reflective computing, etc. There is also strong affinity to so-called autonomous `agent-oriented programming'.
- Object-Oriented Databases (OODB) have been proposed as a model for next generation database systems, which are expected to overcome the limitations of conventional data models. Currently OODB are used in a wide variety of important application areas such as engineering and multimedia information systems, where the fusion of OOP and OODB shows a great promise in providing much more effective architecture for advanced database systems.
- Object-Oriented Software Engineering (OOSE) promises to present solutions to numerous difficulties the software engineers face today. Examples include: OO requirement analysis, OO formal specifications, OO design, OO software databases, etc.

The diversity of different areas suggest that there are underlying, fundamental principles common to a wide range of software development activities. Following up the success of the first ISOTAS, the second ISOTAS focuses again on the object technologies to shed light on such principles. By bringing together the leading researchers in the areas of OOP, OODB, and OOSE, we hope to deepen the understanding of object technologies and establish a solid framework for future advanced software development.

INVITED SPEAKERS

Craig Chambers	*Univ. of Washington*
Richard Helm	*DMR*
Bertrand Meyer	*ISE*
Yuzuru Tanaka	*Hokkaido Univ.*
Dave Thomas	*OTI*

TUTORIALS

Craig Chambers	*Univ. of Washington*
Richard Helm	*DMR*
Shinichi Honiden	*Toshiba*
Bertrand Meyer	*ISE*
Dave Thomas	*OTI*

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Karl Lieberherr	*Northeastern U.*
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Oscar Nierstrasz	*U. of Bern*
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Etsuya Shibayama	*Tokyo Inst. of Tech.*
Yoichi Shinoda	*JAIST*
Jiro Tanaka	*U. of Tsukuba*
Dave Thomas	*Object Tech. Intl.*
Takuo Watanabe	*JAIST*
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Kazumasa Yokota	*ICOT*
Yasuhiko Yokote	*Sony CSL*
Akinori Yonezawa	*U. of Tokyo, ISOTAS'93 PC Co-Chair*
Masatoshi Yoshikawa	*NAIST*
Stanley B. Zdonik	*Brown U.*
Roberto Zicari	*J.W. Goethe U.*

ON-LINE INFORMATION

http://www.jaist.ac.jp/misc/meetings/ISOTAS96/
http://iamwww.unibe.ch/~scg/OOinfo/CFP/ISOTAS96/ *(European mirror)*

TECHNICAL PROGRAM (Tentative)

Wednesday, March 13

Opening and Invited Talk 1

Ubiquitous Smalltalk — Mainframes to a Watch
Dave Thomas (OTI)

Session 1: Design and Evolution

Automating the Evolution of Object-Oriented Systems
Walter L. Hursch and Linda M. Keszenheimer (Northeastern Univ.)

Using C++ Templates to Implement Role-Based Designs
Michael VanHilst and David Notkin (Univ. of Washington)

Expilcit Metaclasses as a tool for improving the design of class libraries
T. Ledoux and P. Cointe (Ecole des Mines de Nantes)

Invited Talk 2

Beyond Design by Contract: Towards Formally Provable Object-Oriented Software
Bertrand Meyer (ISE)

Session 2: Parallelism and Distribution

ICC++ — A C++ Dialect for High Performance Parallel Computing
A. Chien, U. Reddy, J. Plevyak, and J. Dolby (Univ. of Illinois)

Hierarchical Collections: an efficient scheme to build an object-oriented distributed class library for massively parallel computation
Naohito Sato, Satoshi Matsuoka and Akinori Yonezawa (Univ. of Tokyo)

Adaptive Parameter Passing
Cristina Lopes (Northeastern Univ.)

Demonstration (to be announced)

Thursday, March 14th

Invited Talk 3

Patterns in Practice (Tentative)
Richard Helm (DMR)

Session 3: Meta and Reflection

Designing a Meta Object Protocol to wrap a Standard Graphical Toolkit
Erick Gallesio (Univ. de Nice - Sophia Antipolis)

Avoiding Confusion in Metacircularity: The Meta-Helix
Shigeru Chiba, Gregor Kiczales and John Lamping (Xerox PARC)

An Algebraic Semantics of Reflective Objects
Yasuyuki Tahara, Fumihiro Kumeno, Akihiko Ohsuga and Sinichi Honiden (Information-Technology Promotion Agency)

Invited Talk 4

Title, to be announced.
Yuzuru Tanaka (Hokkaido Univ.)

Session 4: Evaluation of Reuse

A Metric for Evaluating Effectiveness of Object-Oriented Interface for Promoting Software Reuse
Koki Nakanishi and Takashi Arano (NTT Software Laboratories)

Experience in Classification and Reuse of Synchronization Schemes
Jean-Pierre Briot (Univ. of Tokyo)

Panel

High-Performance C++: How Many Language Extensions do you Need? (tentative)
Moderator: Yutaka Ishikawa (Real World Computer Partnership)
Panelists: Andrew Chien (Univ. of Illinois), Dennis Gannon (Indiana Univ.), Carl Kesselman (Caltech), etc.

Friday, March 15th

Invited Talk 5

Title, to be announced.
Craig Chambers (Univ. of Washington)

Session 5: Database, Persistency, and File Systems

Ocore and VAST — Integrating Persistence into a Parallel Object-Oriented Language
Jorg Nolte, Hiroki Konaka, Atsushi Hori, Yutaka Ishikawa, Munenori Maeda and Takashi Tomokiyo (Real World Computer Partnership)

A Metaobject Protocol for Accessing File Systems
Chris Maeda (Univ. of Washington)

Subtyping by Constraints in Object-Oriented Databases
Wolfgang Kowarschick, Gerhard Kostler, and Werner Kiessling (Technische Universitaet Muenchen)

Closing