



## Code::XtremeApps: Prize Presentation And Programming Language Seminar

Programming languages development has come a long way and will continue to evolve for many years to come. New languages such as Javascript, Python and Ruby are being invented whilst old one such as Fortran are developing new dialects. These dynamic developments make programming fun.

Using our creative minds and knowledge of programming languages to develop a software application or a service that works and is useful to others can be very interesting, challenging and rewarding. To demonstrate the fun in applications development and promoting programming as an essential aspect of using information technology, the IT Standards Committee is organizing its first programming competition called "Code::XtremeApps:" on 22-23 September 2007 where participants get to develop cool applications and applets using the technologies such as Ruby on Rails, Google Gadgets, Google Maps and Google Web Toolkit.

The climax of the "Code::XtremeApps:" Competition is the prize presentation and programming language seminar on 28 September 2007 where you will get to see and cheer the winners of the "Code::XtremeApps:" as well as hear the international experts from JTC1/SC22 share on the latest developments on the various programming languages and standards, and trends on computer science education. SC22 is the international standards for programming languages, their environments and system software interfaces.

Hurry and sign up for the "Code::XtremeApps:" Prize Presentation And Programming Language Seminar !

Date: 28 September 2007  
Time: 8.30 am to 12.30 pm  
Venue: Orchard Parade Hotel  
1 Tanglin Road  
Singapore 247905  
Fee: Free. Seats are based on a 1<sup>st</sup>-come-1<sup>st</sup>-serve basis  
Registration: Visit the ITSC website at [www.itsc.org.sg](http://www.itsc.org.sg) to register

Time	Programme
08:30	Registration
09:00	Welcome Address by Mr Robert Chew, Chairman, IT Standards Committee, Singapore
09:15	"Code::XtremeApps:" Prize Presentation by Guest of Honour, Dr Vivian Balakrishnan, Second Minister for Information, Communication and the Arts

09:30	<p>The continuing evolution of Fortran by Mr John Reid, Rutherford Appleton Laboratory, UK, and Convener of the ISO/IEC Fortran Committee</p> <p><i>Fortran was the first computer language to be standardized, in 1966. Since then, the standard has been revised four times, in 1977, 1990, 1995, and 2003. We will summarize the main changes made in these revisions. A further revision is planned to reach Final Committee Draft stage in 2008. The addition of co-arrays will transform Fortran into a language built for efficient and convenient parallel programming. Cray's experience with a subset that has been available for a decade has demonstrated its effectiveness and popularity with users.</i></p>
10:00	<p>ISO/IEC Other Working Group (OWG) on Vulnerabilities by Mr John Benito, Blue Pilot Consulting, Inc</p> <p><i>The presentation will cover the ISO/IEC JTC 1/SC 22 OWG Vulnerabilities project, which is preparing an ISO/IEC Technical Report containing guidance to users of programming languages on how to avoid the vulnerabilities that might exist in a programming language.</i></p>
10:30	Tea-break
10:50	<p>Open Source / Open Standards: How The SC22 Standards Have Shaped The Open Source Industry by Mr Nick Stoughton, Linux Foundation &amp; USENIX</p> <p><i>The presentation will cover how the POSIX, Linux, C and C++ standards have shaped the Open Source Industry over the last 20 years, highlighting the standardization process, and the benefits standards have brought to Open Systems and Open Software.</i></p>
11:20	<p>Ecma International's Role in Programming Language and Environment Standardization by Mr Rex Jaeschke, Microsoft</p> <p><i>Ecma International is a recognized Standards Development Organization. Although most of its standards have been hardware-related, in recent years, it has also produced some important software standards. These include the ECMAScript scripting language, the C# and Eiffel programming languages, the CLI runtime environment, and extensions to the Standard C++ language to support CLI. Ecma was also involved in an early Java standardization effort. Many Ecma standards are Fast Tracked to ISO/IEC JTC 1. In this presentation, we'll look at the Ecma development process, the JTC 1 Fast Track Process, and recent proposals for long-term maintenance agreements with JTC 1.</i></p>
11:50	<p>Current Developments in CS Education: Teaching Introductory Programming by Dr Jonathan Hodgson, Saint Joseph's University</p> <p><i>The talk will describe some of the challenges facing those of us who teach introductory programming courses in the USA. A number of differing approaches to dealing with these problems will be described.</i></p>
12:20	End

**Note: The organiser reserves the right to change the programme without prior notice.**

## Speakers' Biography

### 1. Mr John Reid, Rutherford Appleton Laboratory, UK, and Convener of the ISO/IEC Fortran Committee

Mr John Reid is a numerical analyst whose research work has been mainly in the area of sparse matrices. This was done at University of Sussex 1964-9, Harwell 1969-1990, and Rutherford Appleton Laboratory since 1990. Since 1969, he has been writing numerical software in Fortran.

John was a member of IFIP Working Group 2.5 on mathematical software, 1974-1998, Secretary 1979-1983 and Chairman 1983-1987. He was also a member of the US Fortran Committee J3, 1983-1991, during the construction of Fortran 90. Since then, he has attended meetings of the ISO/IEC Fortran Committee JTC1/SC22/WG5 and has been convener since 2000. He has also written a sequence of OUP books with Mike Metcalf (recently also with Malcolm Cohen) that summarized and explained each successive version of the Fortran standard.

### 2. Mr John Benito, Blue Pilot Consulting, Inc

John is an independent consultant providing software development, project management and testing. He is the current Convener of ISO/IEC WG14, the Convener of ISO/IEC OWG Vulnerabilities, the Vice-chairman of INCITS CT22 and a member of the INCITS J11 technical committee. He previously was a member of INCITS J16 (ANSI C++) and the ISO Java Study group. He has been in software development, project management and testing for over 30 years.

### 3. Mr Nick Stoughton

Mr Nick Stoughton started his career at the University of London after graduating from there in 1981. He has worked as an IT consultant on numerous projects, both in the USA and in Europe. Specialist areas include the design and implementation of Customer Relationship Management systems, complex integration projects, system administration and International Standards. Nick serves as the ISO representative to the POSIX working group, the POSIX liaison to other language working groups, Liaison from USENIX to several standards organizations, and Liaison from the Linux Foundation to ISO. He is also editor of ISO/IEC IS 23360 LSB-Core, and editor of a Technical Report from the ISO-C working group.

### 4. Mr Rex Jaeschke, Microsoft

Mr Rex Jaeschke is an independent consultant, author and seminar leader. His involvement with programming languages includes the following activities:

1. ISO/IEC JTC 1/SC 22 — Head of the U.S. delegation, and nominee to be the next chair.
2. ISO/IEC JTC 1/SC 22/WG 14 and INCITS/J11 (C) — Served 15 years in various capacities.
3. ISO/IEC JTC 1/SC 22/JSG (Java Study Group) — Recording secretary.
4. Ecma TC41 (Java) — Convener of Task Group 3, APIs.
5. Ecma TC39 Task Group 2 (C#) — Project editor.
6. Ecma TC39 Task Group 3 (CLI, a subset of .NET) — Project editor.
7. Ecma TC39 Task Group 5 (C++/CLI) — Project editor.
8. Liaison between Ecma International and ISO/IEC JTC 1/SC 22.
9. Worked in the software industry for 31 years, with numerous languages (including C, C++, Java, C#, COBOL, Fortran, BASIC, DIBOL, and various assemblers) and operating systems.
10. For more than 23 years, involved in editing and writing about issues related to program languages, environments, and their standardization.
11. Developer and leader of numerous programming language seminars.

## **5. Dr Jonathan Hodgson, Saint Joseph's University, Philadelphia, US**

Dr Jonathan Hodgson graduated from Cambridge University with a degree in Mathematics in the last year that EDSAC II was in service. He received his Ph.D. in Mathematics in May of 1967. During the seven years following he taught at the University of Pennsylvania, Warwick (UK) University and the University of British Columbia, before settling down for eleven years at Adelphi University where he first became interested in using the computer for simulating predator-prey interactions and drawing projections of knots using PLOT-10 and a Tectronix terminal. This developed into an interest in Artificial Intelligence so that by the time he moved to his present position at Saint Joseph's University he began to describe himself as a computer scientist. A fascination with logic programming led him to join the US Tag for Prolog in the early nineties. He became convener for WG17 the SC 22 Tag for Prolog in 1999. He is currently serving a second term as director of the Master's program in Computer Science at Saint Joseph's. He was department chair for four years at Adelphi and for seven at Saint Joseph's. Besides being active in standards activities he reviews regularly for Computing Reviews, researches in constraint programming and supply chain modeling. He is the Principal Investigator for a series of NSF grants supporting the use of ALICE as a tool to introduce programming.