CALL FOR PARTICIPATION

A Workshop on Using the Ch Computing Environment for Teaching, Research, and Industrial Applications

Beijing, China, October 12, 2008

http://www.asmemesa.org/chworkshop

Objectives

The evolving nature of technology requires the new generation of engineers and scientists developing strong capabilities in computer and information technology. Ch, a user friendly cross-platform C/C++ computing environment, has been widely used for teaching computer programming to solve problems in engineering and science. Ch is a C/C++ interpreter with high-level numerical and plotting extensions. It significantly simplifies numerical and scientific computing. Due to its interactive nature, Ch is especially effective for teaching and learning C programming. Ch is also an embeddable scripting engine, which can be seamlessly embedded into a compiled program to make it reprogrammable through the use of C/C++ scripts. It can be conveniently used to realize many novel computing paradigms such as mobile computing. In this workshop, the evolution and future of C will be presented. Teaching, research, and industrial application experience using Ch will be shared with participants. Various software toolkits developed in Ch will also be presented. More information about the workshop can be found at the workshop web site http://www.asmemesa.org/chworkshop/.

Organizing Committee

Chair, Harry H. Cheng, Professor, University of California, Davis, USA
Co-Chair,Yaoxue Zhang (张尧学院士), Professor and Academician
Tsinghua University, China
Co-Chair, Guangnan Ni (倪光南院士), Professor and Academician,
Institute of Computing Technology, Chinese Academy of Sciences, China

David M. Auslander	University of California, Berkeley, USA
Larry Chang（张潜渭)	Pro-Lambda Solutions, China
Bo Chen	Michigan Technological University, USA
Ying Chen（陈鹰）	Zhejiang University, China
Dongming Guo（郭东明）	Dalian University of Technology, China
Zuomin Dong	University of Victoria, Canada
Xudong Hu（胡旭东)	Zhejiang Sci-Tech University, China
Bahram Ravani	University of California, Davis, USA
Maosong Sun（孙茂松）	Tsinghua University, China
Jianrong Tan（谭建荣院士）	Zhejiang University, China
Huayong Yang（杨华勇）	Zhejiang University, China
Tianmiao Wang（王田苗）	Beihang University, China
Zhaoqing Wang（王兆青）	Zhejiang Sci-Tech University, China

Sponsors

IEEE Intelligent Transportation Systems Society
ASME Division of Design Engineering
Chinese Academy of Sciences
Chinese Association for Automation
Chinese Mechanical Engineering Society

Co-sponsors

National Natural Science Foundation of China
Division of Higher Education, Ministry of Education of the People's Republic of China

Venue

The Workshop will be held in the 4th 2008 IEEE/ASME International Conference on Mechatronic and Embedded Systems and Applications (MESA08) in Beijing, China on October 12-15, 2008 with a web site at **http://www.asmemesa.org**.

Advanced Registration Date: September 15, 2008

Please register to participate at the web site **http://www.asmemesa.org/chworkshop/**.

Agenda

Sunday, October 12, 2008

8:00am-9:00am On-Site Registration
9:00am-12:00pm Technical Program

Welcome Remarks: Professor Harry H. Cheng, University of California, Davis, USA

Chair: Professor Jianrong Tan（谭建荣 院士, Academician), Zhejiang University, China
(1) Opening Speech
Professor Yaoxue Zhang (张尧学院士, Academician)
Tsinghua University, China
(2) "Evolution and Future of C"
Professor Harry H. Cheng
University of California, Davis, USA

Break

Chair: Dongming Guo（郭东明), Dalian University of Technology, China
(3) "Teaching Mechatronics Using Ch"
Professor David M. Auslander
University of California, Berkeley, USA
(4) "Integration of Information Technology into Engineering Education"
Professor Bahram Ravani
University of California, Davis, USA
(5) "Effective Teaching of Introductory Computer Programming for Solving Problems in Engineering and Science"
Professor Harry H. Cheng
University of California, Davis, USA

12:00pm -1:00pm Lunch
1:00am-5:30pm Technical Program

Chair: Professor Ying Chen(陈鹰), Zhejiang University/Hangzhou Dianzi University, China
(1) "Using Ch for Teaching, Research, and Industrial Applications"
Professor Harry H. Cheng
University of California, Davis, USA
(2) "C/C++ Interpreter Ch for Mechatronic and Embedded Systems"
Professor Tianmiao Wang（王田苗）
Beihang University, China
(3) "Teaching C Programming Using Ch "
Professor Li Zheng（郑莉）
Tsinghua University, China
(4) "Teaching Introductory C Programming Using Ch Interpreter"
Professor Zhaoqing Wang（王兆青),
Zhejiang Sci-Tech University, China

Break

Chair: Professor Huayong Yang（杨华勇), Zhejiang University, China
(5) "Teaching Automatic Control of Engineering Systems Using Ch Control System Toolkit" and
"Sensor Networks for Structural Health Monitoring Using Ch"
Professor Bo Chen,
Michigan Technological University, USA

(6) “Embedded Scripting in C/C++ for Product Mass Customization”
Professors Jianrong Tan（谭建荣院士, Academician) and Shuyou Zhang (张树友)
Zhejiang University, China

(7) "A Ch-Based Platform for Simulation-Driven Designs and Analyses"
Dr. Jerry Young（杨积东）
Managing Director, CAE Technology
Shanghai Academy of Spaceflight Technology
Dr. Larry Chang（张潜渭）
CEO, Pro-Lambda Solutions

(8) “The Market and Technology Trend of Computer-Aided Engineering and Importance of Scripting Languages“
Dr. Jin hwan Choi
Chairman, FunctionBay, Inc.

(9) Concluding Speech
Professor Guangnan Ni (倪光南院士, Academician)
Institute of Computing Technology, Chinese Academy of Sciences, China