

## **First Announcement**

# **2003 NAIST COE International Symposium Ubiquitous Networked Media Computing**

### **Sponsored by**

The 21<sup>st</sup> Century COE Program  
Ministry of Education, Culture, Sports, Science and Technology (MEXT)

### **In cooperation with**

Graduate School of Information Science, Nara Institute of Science and Technology  
Information Technology Center  
Nara Institute of Science and Technology (NAIST)

**March 17 – 18, 2003**

Millennium Hall, NAIST, Nara, Japan

In the year 2002 the Ministry of Education, Culture, Sports, Science and Technology started the “Priority Assistance for the Formation of Worldwide Renowned Centers of Research - The 21st Century Center of Excellence Program.” This program is based on the competitive principle that selection for support by the program relies on third party evaluation, and by giving priority support to the formation of world-class centers of research it aims to promote the creation of internationally competitive universities that answer to the world’s highest standards. The Ministry makes a selection from proposals sent by universities from all over Japan for the formation of centers of research and education on a graduate school specialization level. In 2002, from 5 fields of study, namely the Life Sciences, Chemistry/Materials Sciences, Information/Electrics/Electronics, the Human Sciences, and Interdisciplinary Research/Combined Research Areas/New Fields of Research, 113 centers were selected from a total of 464 applications, and Graduate School of Information Science, NAIST was selected to be a center of research for “Ubiquitous Networked Media Computing.”

The objective of the symposium is to foster the development of the area by providing a forum where researchers and practitioners can report on and discuss new research results in the area of ubiquitous networked media computing. The symposium encourages the exchange of ideas within the international community so as to be able to understand the strengths and weaknesses of technology in use and new technologies, with the expectation of furthering the more generic field of ubiquitous networked media computing.

## **Location**

Millennium Hall, Nara Institute of Science and Technology (NAIST), Nara, Japan  
(<http://adw3.aist-nara.ac.jp/Info-e/access-e.html>)

## **Registration**

Please visit the symposium website (<http://isw3.aist-nara.ac.jp/21COE/symposium2003/>) to register your name.  
No Charge for registration.

## **Contact**

For general issues about the symposium, please contact to

The 21<sup>st</sup> Century COE Program Secretariat  
Graduate School of Information Science  
Nara Institute of Science and Technology  
8916-5 Takayama, Ikoma, Nara 630-0192, Japan  
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# Advance Program

Monday, March 17, 2003

- 8:45 - 9:30      **Registration**
- 9:30 - 10:00      **Opening**      Chair: *Kenichi Matsumoto*  
Welcome  
*Koji Torii* (President, NAIST, Japan)  
Overview of the 21<sup>st</sup> Century COE Program: Ubiquitous Networked Media Computing  
*Kunihiro Chihara* (The 21<sup>st</sup> Century COE Program Leader, NAIST, Japan)
- 10:00 - 12:00      **Session 1: Ubiquitous Medical Media Computing**      Chair: *Kenichi Matsumoto*  
Invited Talk  
Internet Interoperability and Steps toward the Human Physiome  
*Forbes Dewey* (Massachusetts Institute of Technology, USA)  
Invited Talk  
Medical Information Systems - Present and Future  
*Richard Kitney* (Imperial College, UK)  
Invited Talk  
Flexible Bit Streams for Ubiquitous Multimedia Medical Applications  
*Benoit Macq* (Catholic University of Louvain, Belgium)
- 12:00 - 13:30      **Lunch and Poster Session**
- 13:30 - 15:30      **Session 2: Real, Virtual, and Mixed Worlds (1)**      Chair: *Naokazu Yokoya*  
Invited Talk  
Modeling Cultural Heritage through Computer Vision Techniques  
*Katsushi Ikeuchi* (University of Tokyo, Japan)  
Invited Talk  
Small Steady Steps and a Giant Leap Toward Practical Mixed Reality Systems and Applications  
*Hideyuki Tamura* (Canon Inc., Japan)  
Invited Talk  
The Cyberworld Reference Model for Wireless World  
*Petri Pulli* (University of Oulu, Finland)
- 15:30 - 16:00      **Coffee Break and Poster Session**
- 16:00 - 18:00      **Session 3: New Directions to Speech Recognition**      Chair: *Kiyohiro Shikano*  
Invited Talk  
CHIL Computing, Putting “Computers in the Human Interaction Loop”  
*Alex Waibel* (Carnegie Mellon University, USA, Karlsruhe University, Germany)  
Invited Talk  
Signal Processing for Robust Speech Recognition  
*Richard Stern* (Carnegie Mellon University, USA)  
Hands-Free Speech Communication System Using Ubiquitous Interface  
*Hiroshi Saruwatari* (NAIST, Japan)  
Non-Audible Murmur Recognition - The New Universal and Individual Design Interface -  
*Yoshitaka Nakajima* (NAIST, Japan)
- 18:00 - 18:50      **Reception**

**Tuesday, March 18, 2003**

- 8:45 - 9:30      **Registration**
- 9:30 - 10:40    **Session 4: Natural Language Technology**      Chair: *Yuji Matsumoto*  
Invited Talk  
Research and Services of the German Competence Center for Language Technology  
*Hans Uszkoreit* (German Research Center for Artificial Intelligence/Saarland University, Germany)  
  
Robust Language Processing of Real World Text Documents  
*Yuji Matsumoto* (NAIST, Japan)
- 10:40 – 11:20    **Session 5: Nanotechnology based Reliable Systems**      Chair: *Hideo Fujiwara*  
Invited Talk  
Research Directions in Manufacturing Testing of Nanotechnology Products  
*Kewal K. Saluja* (University of Wisconsin, USA)
- 10:40 – 12:30    **Session 6 Advanced Internetworking Technology**      Chair: (TBD)  
Invited Talk  
JGN, toward Ultra High bandwidth Ubiquitous Network Infrastructure  
*Hiroshi Esaki* (Telecommunications Advancement Organization of Japan/University of Tokyo, Japan)  
  
(Title: TBD)  
*Suguru Yamaguchi* (NAIST, Japan)
- 12:30 - 13:30    **Lunch and Poster Session**
- 13:30 - 15:30    **Session 7: TBD**      Chair: *Hirokazu Nishitani*  
Invited Talk  
Exploring Human-like Interactions with Humanoid Robots  
*Gordon Cheng* (ATR International, Japan)  
Invited Talk  
Toward the Robotics research which can create new Robotic Business  
*Kazuo Tanie* (National Institute of Advanced Industrial Science and Technology, Japan)  
Invited Talk  
Making International Research Collaboration Work, Experience in Europe, US and Asia  
*Alex Waibel* (Carnegie Mellon University, USA, Karlsruhe University, Germany)
- 15:30 - 15:45    **Break**
- 15:45 - 17:25    **Session 8: Real, Virtual, and Mixed Worlds (2)**      Chair: *Hideo Fujiwara*  
Invited Talk  
MR and Real World Avatar  
*Michitaka Hirose* (University of Tokyo, Japan)  
Networked Video Surveillance and Monitoring Using Omnidirectional Cameras  
*Naokazu Yokoya* (NAIST, Japan)  
(Title: TBD)  
*Tsukasa Ogasawara* (NAIST, Japan)
- 17:25 - 17:35    **Closing**  
Plan for formation of COE in Ubiquitous Networked Media Computing  
*Kunihiro Chihara* (21<sup>st</sup> Century COE Program Leader, NAIST, Japan)
- 17:35 - 18:45    **Scientific Tour**  
(TBD)

# **Members of the 21st Century COE Program: Ubiquitous Networked Media Computing**

**Leader**

Kunihiro Chihara

**Core Members**

Hideo Fujiwara

Kenichi Matsumoto (Symposium Executive Chair)

Yuji Matsumoto

Hirokazu Nishitani

Tsukasa Ogasawara

Kiyohiro Shikano

Suguru Yamaguchi

Heiichi Yamamoto

Naokazu Yokoya

Graduate School of Information Science

Nara Institute of Science and Technology