

#### INSTITUTE OF INFORMATION TECHNOLOGY

Welcome to

INSTITUTE
OF INFORMATION
TECHNOLOGY



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Vietnamese Academy of Science and Technology

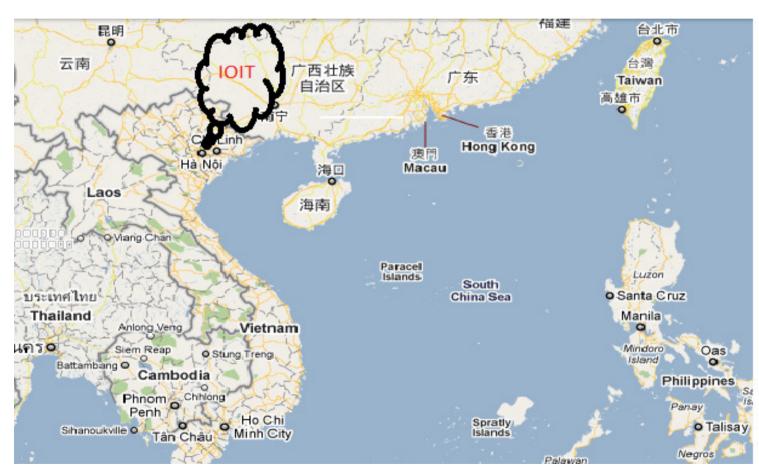


## **Content**

- Introduce Institute of Information
   Technology (IOIT) Vietnamese Academy of
   Science and Technology (VAST)
- Grid computing in VAST
- Large-Scale Software Verification



## Where are we?





## **Background**

- IOIT the biggest IT research Institute in Vietnam, one of 30 National Institutes from VAST
- Brief History: Institute established in 1976
  - Institute of Computer Science and Cybernetics (ICSC), 1976
  - Institute of Informatics (IOI), 1989
  - Institute of Information Technology (IOIT),1993



## **Vietnam Government**

http://www.chinhphu.vn

Government

## Ministries and Ministry-Level Agencies

- Ministry of Education and Training
- Ministry of Information and Communications
- Ministry of Science and Technology

#### -...

- Government Office
- State Bank of Vietnam

- ...

#### **Government's Agencies**

- Vietnamese Academy of Science and Technology (VAST)
- Vietnamese Academy of Social Science and Humanities
- Vietnam News Agency

-..



### **Vietnamese Academy of Science and Technology**

http://www.vast.ac.vn

**VAST** 

#### **Departments and Offices**

- Personnel-Organization Department
- International Relation Department
- Planning-Financial Department
- Administration Office
- ...

#### **Research Institutes and Enterprises**

- Institute of Information Technology (IOIT)
- Institute of Mathematics
- Institute of Materials Science
- Institute of Biotechnology
- Institute of Geophysics
- ..
- Bio-Technology Development Company
- New Technology Application and Tourism Company (NEWTECO)
- ..



## Institute of Information Technology (IOIT) www.ioit.ac.vn

Director: Dr. Thai Quang Vinh

**Department of Administration** 

**NetNam ISP** 

Key-lab for Networking Technology & Multimedia

**MIC Vietnam** 

**Departments** 

- 1. Integrated Software Systems
- 2. Data Management Systems
- 3. Software Engineering in Management
- 4. Databases and Programming
- **5. Geographical Information Systems**
- 6. Pattern Recognition and Knowledge Engineering
- 7. Management Information Systems
- 8. Computer Networking and IT Infrastructure

- 9. Telematics
- 10. Mathematical Aspects of IT
- 11. Computational Statistics
- 12. Automation Technology
- 13. Applications of IT to Control
- 14. Expert Systems and Soft Computing
- 15. Systems and Management Research
- 16. Virtual Reality Systems



### **Human and Research Resources**

- IOIT staffs: ~170 permanent members including ~50 Dr.SC., Ph.D. and 20 Prof, Assoc. Prof., organized in 16 Research Departments; ~50 contract-based members
- Ph.D. and MS. Programs
- One National Key Laboratory for Networking Technology and Multimedia
- NetNam the spin-off company of IOIT is one of the first four Internet Service Providers (ISP) in Vietnam
- Uni. of Science and Technology of Hanoi (USTH)
  - Faculty of Information Technology, www.usth.edu.vn



## **IOIT Functions**

- Carry out fundamental researches on IT
- Develop IT applications, technology transfer, consult, supervise and appraise IT projects
- Design and develop IT products (software, embedded system,...)
- Train scientific researchers on IT
- Organization of conferences, workshops
- International cooperation in IT



## Main R&D topics

- Database, Knowledge Base, Information Systems
- Pattern Recognition
- Computer Vision, Image Processing, Computer Graphics, GIS
- Multimedia, Virtual Reality
- Natural Language Processing
- Software Technology
- Networking Technology, Telecommunication
- Automation and Control, Embedded Systems
- Socio-Economic Information Systems, Management Research
- Numerical Methods, Statistics



## **International Projects**

- A-STAR: Asian Speech Translation Advanced Research, from ATR (Advanced Telecommunication Research Institute International)
- GRID/Cloud Computing: CNRS (IN2P3) France;
   VNGrid (PRAGMA); KISTI (Korea)
- UNFPA Project: Computer Software and Support for Population Activities
- Microsoft: Development of the training materials on new Microsoft technologies.
- IDEA: Images of natural Disasters from robot Exploration in urban Area (IFI, IOIT, L3i, UniKL)



## **International Cooperation**

- JAIST, AIST research projects (AI, NLP, knowledge engineering, software engineering...)
- Keio Univ Asian Internet Interconnection Initiatives (AI3), School on Internet (SOI)
- Microsoft Innovation Center has been setting up at IOIT
- System Center NANO Corporation
- Nayang Tech. Uni., Singapore on Virtual Reality; National University of Singapore
- Promoting Internet Policy and Regulatory Reform, with Internews Europe
- IDRC, Canada Vietnamese portal, e-learning platform,
   Micro Impacts of Macro Economic and Adjustment Policies.
- University of California, San Diego on exchange fellowship programs

## Hopefully, will have more cooperation in the future !!!

# Thank you!