



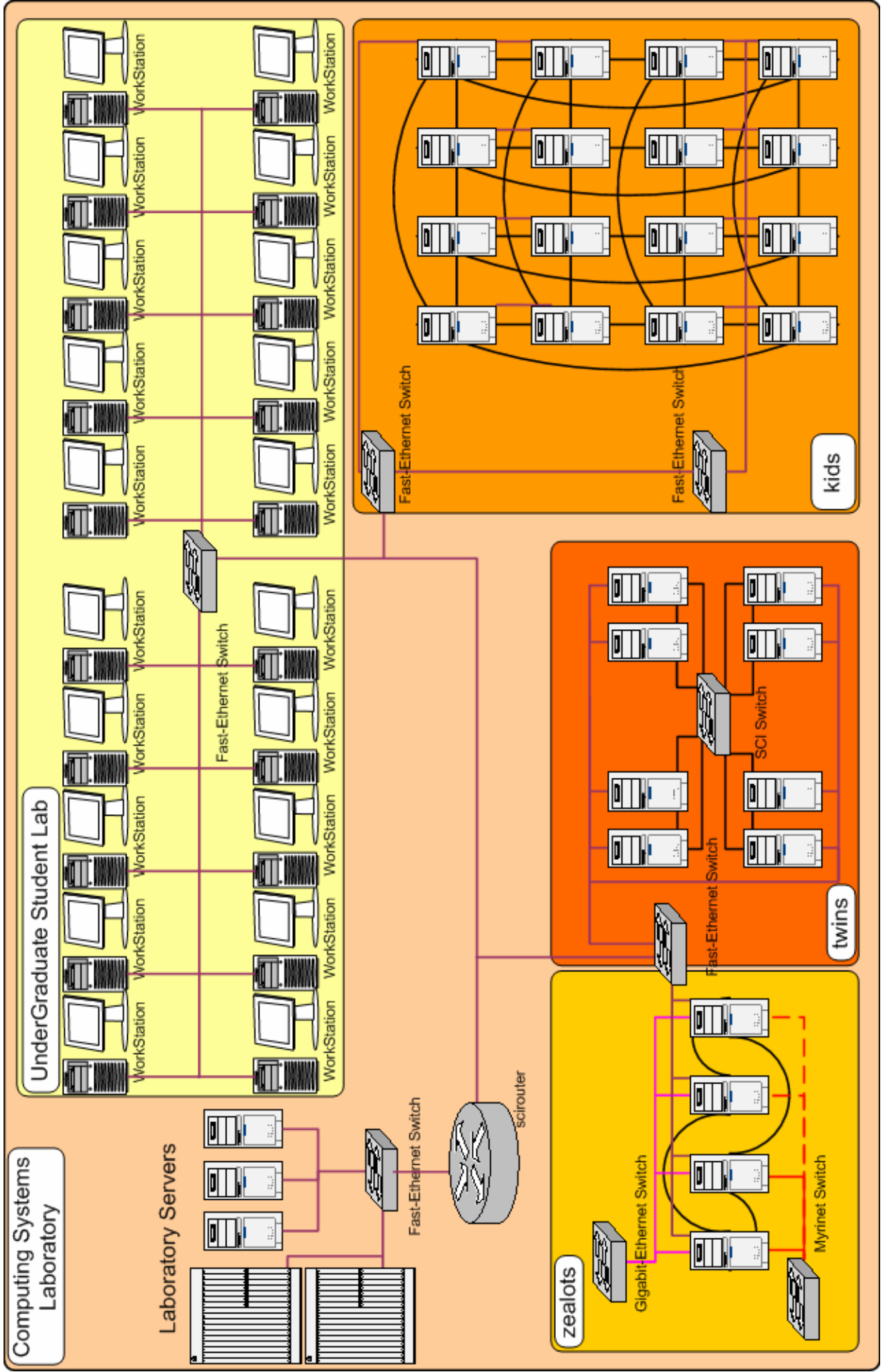
## Introduction

- One of the largest research laboratories in the Computer Science Department of the School of Electrical and Computer Engineering, **National Technical University of Athens**
- Member of the **Institute of Communication and Computer Systems (ICCS)** of NTUA

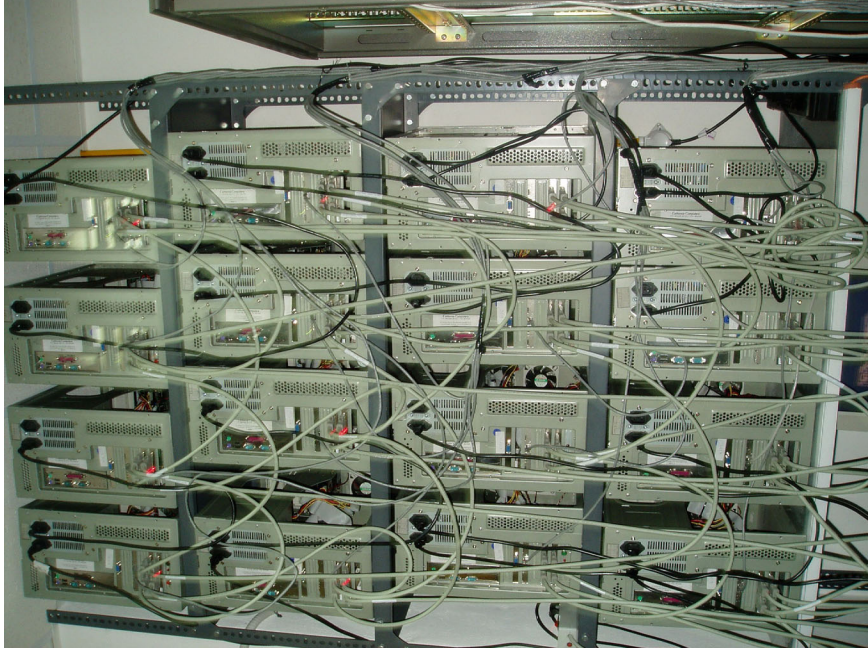


## Facilities (1/2)

- **SMPs:** 2x Sun Enterprise HPC 450 servers with 4 CPUs each
- **kids:** 16x Pentium III@500,256MB RAM, interconnected with SCI (2D torus) and Fast-Ethernet
- **twins:** 8x dual Pentium III@800, 128MB RAM, interconnected with SCI and Fast-Ethernet
- **zealots:** 4x dual PIII@1,26 GHz and SCI, Myrinet, Gigabit-Ethernet, Fast-Ethernet interconnections
- **recycled:** clustered web site that follows the three-tier architecture with deprecated hardware and modern software (Apache – PostNuke - Oracle 9i RAC)
- More than 40 workstations, for the undergraduate and postgraduate students of the laboratory



## Facilities (2/2)





## Research Fields

- Parallel and Distributed Computing Systems
- High Performance Computing and Networking Architectures
- Operating Systems Support
- Embedded (Networking) Systems
- High Level Hardware Design Automation
- High Performance Medical Applications
- Data and Storage Management in Grids



## Laboratory Members

- 3 faculty members
  - **George Papakonstantinou**, Professor (Head of the Lab)
  - **Panayiotis Tsanakas**, Professor
  - **Nectarios Koziris**, Assistant Professor
- 15 graduate students
- 10 undergraduates
- 30 Alumni members

## Enabling Grids for E-science in Europe (EGEE)



- ICCS-CSlab will provide a dedicated team of middleware experts
- ICCS-CSlab will support the installation and co-handle the administration of the major GRNET cluster node in cooperation with Demokritos and IRIS
- ICCS-CSlab will be supported by effort from Demokritos and will also be responsible for coordinating effort from NTUA (telecom lab?!) regarding operations
- ICCS-CSlab will focus on general cluster management, operations and monitoring (networking, storage, CMS, installation)



## ICCS-CSlab Team



Antonis Zissimos



Vaggelis Koukis



Fotis Georgatos





## Projects

- SMART-PIV: “Development of an Interactive Integrated P.I.V System based on Miniaturised Optical Sensor Technology for Implantable Biomedical Devices Design,” IST-2002-37548 (started June 2002)
- TOPCARE: “Implementation of a telematic homecare platform in cooperative health care provider networks,” IST-2000-25068
- INCO-DC: “PEACE by High Performance Computing,” INCO-950895-EU
- TetraMED: “Technology Transfer in HPCN in the Mediterranean Countries,” HPCN-III/98/028-EU
- VELOS: “Advanced CAD Applications in Aircraft and Vehicle Design using High Performance Computing Architectures,” GSRT-EKBAN
- PENED–91/663: “Automated Synthesis of VLSI Architectures for Special Purpose Applications”, Greek Secretariat for Research and Technology-GSRT, Ministry of Development
- PENED-95/1405: “Automatic Parallelization of Sequential Algorithms”, Greek Secretariat for Research and Technology” - GSRT, Ministry of Development
- AMBULANCE: “Mobile Unit for Health Care Provision via Telematics Support.” (EU/Telematics – Health Care)
- NIKA: ”A generalised system for medical image management,” GSRT-EKBAN-504
- HILDE: ”Hypermedia Intelligent Learning Design Environment,” GSRT-EPET-2
- MODULATES MM-1018: “Multimedia Organisation for Developing the Understanding and Learning of Advanced Technology in European Schools,” EU-Educational Multimedia Taskforce
- ARTEMIS: “Greek Distributed Digital Library for Grey Literature,” EPEAEK
- DIALOGOS: “Development of the Greek language and speech industry,” GSRT-EKBAN (parallel computing platform for Greek speech recognition)