

### **COMSATS** Institute of Information Technology, Islamabad, Pakistan

CIIT was established for training professional human resource in 1998. It received its charter from the Federal Government as a degree awarding institute in August 2000 and is selected to be upgraded to the status of a university (Comsats University). CIIT currently has seven campuses in Islamabad, Lahore, Wah, Abbottabad, Attock, and Sahiwal. It is is offering 41 different degree programs in the fields of Information and Communication Technology, Management Sciences, Electrical Engineering, Chemical Engineering, Mathematics, Physics, Bio-sciences, Development Studies, Environmental Science, Meteorology, and Architecture and Design.

# **Image Processing Centre**

Image Processing Centre was established at College of Signals, National University of Sciences and Technologies, Rawalpindi, Pakistan with the aid of Ministry of Science and Technology in 2006. The centre is dedicated to research in academic domain as well as in industry.

# GET Lab

GET Lab is a laboratory supervised by Prof. Dr. Bärbel Mertsching for research in interdisciplinary topics at the Faculty for Electrical Engineering, Computer Science, and Mathematics, Paderborn University, Germany. The focus of work is on cognitive systems, autonomous mobile robots, biologically inspired algorithms, simulation frameworks for robots in virtual reality environments, and development of software and hardware components for application oriented robotics such as rescue and agriculture robots.

### SCHEDULE

Monday, 27th July 2009 Session – 1:

1500HRS - 1800HRS

Tuesday, 28<sup>th</sup> July 2009 Session -2:

1500HRS - 1900HRS

Wednesday, 29th July 2009 Session -3:

1500HRS - 1900HRS

Thursday, 30<sup>th</sup> July 2009 Session -4:

1500HRS - 1900HRS

**COMSATS** Institute of Venue:

Information Technology,

Park Road, Shahzad Town,

Islamabad

Dr. Nasro Min-Allah

**Assistant Professor.** 

**Department of Computer Science** 

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**Islamabad Campus** 

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### SEMINAR SERIES ON

- 1. Techniques and Tools for Quality Research and Publications
- 2. Biologically Motivated Machine Vision

27th-30th July, 2009







Technology, Islamabad, Pakistan



Headed by Dr. Naveed Igbal College of Signals, NUST Rawalpindi, Pakistan

In association with:



Prof. Dr. Bärbel Mertsching Paderborn University, Germany

### The Seminars

# 1. Techniques and Tools for Quality Research and Publications

The first seminar focuses on methods and tools that can help in improving the quality of research in academic institutions. As publications is a direct measure of the outcome of research, emphasis will also be given on writing acceptable papers for workshops, conferences, and journals.

# 2. Biologically Motivated Machine Vision

The second seminar intends to develop awareness about the research on biologically inspired vision systems and introduce the state-of-the-art related to some aspects in the field. Researchers, faculty members, and students working in the area of machine vision and having interest in exploring new emerging directions of the field can especially benefit from this opportunity.

### **Contents Outline**

#### Session 1: Research and Publications

- Research and its importance
- Thinking like a researcher
- Reading existing literature
- Organizing research work
- Writing quality publications

#### **Session 2: Machine Vision and Applications**

- A review of traditional computer vision
- Active vision systems
- Image mosaicing techniques

### Session 3: Biological Vision and Its Modeling

- Sources of knowledge for biological vision
- Human vision system
- Computational models of biological vision

### **Session 4: Attentive Vision and Applications**

- Visual attention
- Scene exploration, target search, and tracking
- Practical demonstration of visual attention models
- Introduction to research projects in GET Lab

## **The Speakers**

Muhammad Zaheer Aziz is research scientist/ Assistant Professor at GET Lab, Paderborn University, Germany since 2004. He received his masters in computer science with majors in machine vision from International Islamic University Islamabad and completed his PhD from GET Lab, Paderborn University in biologically inspired robotic vision. He has been actively involved in organization of research related activities and is author of a number of articles in conferences and journals of international repute.

Naveed Iqbal Rao is a well published researcher in the field of computer vision and Image Processing. He is PhD graduate (2003-2007) from Tsinghua University ,Beijing, China. Presently he is Associate Professor at Miltary College of Signals, and is Director Image Processing Center. He has interacted with Google Inc, and Microsoft Research Asia, Beijing China for various vision projects and is involved in collaborative research with Carnegie Mellon University (CMU), University of Central Florida (UCF), USA, and Tsinghua University, China.