PLENARY SESSION

Chairman: Prof. Dr. V. Poulkov, Technical University of Sofia, Bulgaria

Future Cellular Networks for a Society in Motion
Univ.Prof. Dipl.-Ing. Dr.techn. Markus Rupp, TU Wien

Abstract: It is expected that by 2050 about 86% of the world's population shall be urbanized. Even though most people will concentrate around city centers, they will have to commute substantially. Not just going to work can require several hours a day but also every errand, every event people want to participate it. These hours of travelling can be unproductive but once wireless connections to the internet are available, lots of activities can be fulfilled. No matter if public transportation by bus or train, or individual automobile transportation, lots of wireless connections are required. But not only commuting people are causing high data traffic, also the busses, cars and trains themselves will participate in data traffic generation and finally even dominate due to many desirable features in security, safety and fleet control. The wireless internet today is based on a nomadic use for its participants.
In this talk the challenges for future wireless networks to deal with such mass of high mobile users are being set and first ideas to overcome such hurdles with existing and future networks are being proposed. The limitations of the current physical layer are explained, potential solutions such as Hetnets, distributed antennas and eMBMS services are explained in such context. Only few of the recent ideas proposed for 5G networks appear as feasible solutions.

WORKSHOP - REASONING-BASED INTELLIGENT SYSTEMS

Chairman: Prof. Dr. Kazumi Nakamatsu, University of Hyogo, Japan

Big Data Approach in an ICT Agriculture Application
Prof. Alireza AHRARY, PhD, Sojo University, Japan

Abstract: In the case of Agriculture, what kind of technologies can be applied in agriculture? Specifically, ICT technologies can be represented by any device, tool or application that allows the end user to exchange, share or collect any desire information. The term ICT encloses every technology from satellite connections to mobile devices or sensor networks. An new affordable devices enable developing countries to access this technology, allowing farmers to take advantage of the different characteristics. In this presentation we will introduce the ICT in agriculture in Japan and talk about the most important difficulties in this area.

From Search Engine to Text Mining
Prof. Dr. Sachio HIROKAWA, Kyushu University, Japan

Abstract: Search Engine is a "must" in today's life, not only for ordinary people but also business person or researcher. Use of search engine varies according to the purpose of search. When we want to know a nice restaurant, we can check the list of gourmet blog found as the search result. It won't take a few seconds. However, when we - researchers - make a survey or search on related work, it takes a few weeks or months. We have to find related articles, researchers and keywords. Moreover, we have to continue further search on those researchers and those keywords we found in the first stage search. In other words, we have to keep searching. In the present talk, I'd like to introduce my advanced search engines, "cross table" search engine and "mind map" search engine, which performs text mining.

Paraconsistent Logics and Applications
Prof. Dr. Jair Minoro ABE, Paulista University, Brazil

Abstract: In this work we summarize some of the applications of so-called Paraconsistent logics, mainly one class of them, the paraconsistent annotated logics. Roughly speaking such systems allow inconsistencies in a non-trivial manner in its interior; so it is suitable to handle themes in which inconsistencies become a central issue, like pattern recognition, non-monotonic reasoning, defeasible reasoning, deontic reasoning, multi-agent systems including distributed systems, collective computation, among a variety of themes.