Speaker: Dr. Kerem Par, Infotech Bilişim ve İletişim Teknolojileri A.Ş.

Title: Using Digital Maps and Location Information in Business Applications and Intelligent Vehicles

Abstract:
The use of digital maps and location information is becoming increasingly
important for various application areas like business applications, consumer applications and
automotive applications. This brings many opportunities but at the same time many challenges in
efficiently storing and processing of spatial information in both server based and embedded
environments.

In the first part of the presentation gives a high level overview of various aspects of using spatial
information in business applications such as business requirements, positioning techniques, geocoding,
architecture of a location based system, how to store and process spatial data in relational databases,
how to build scalable systems to handle high number of spatial transactions using engineered systems
also giving examples from a set of real life applications.

The second part covers the use of digital maps and location information in the emerging intelligent
vehicles domain and in ADAS (Advanced Driver Assistance Systems) applications. A set of use cases
are given such as enhanced localization by fusing GNSS position and digital maps, enhanced Traffic
Sign Recognition with map fusion, integrating GNSS and V2V (Vehicle to Vehicle) communication
technology and local integrity heat maps.

Biography: Dr Kerem Par (BSc 1991, MSc 1993, PhD 2013 in Computer Engineering of Bogazici University) has 21 years of experience in TLC, mobile and LBS. He has extensive experience in design and development of large scale software projects. He started as a research assistant in the computer engineering department at Bogazici University (1991-1993). Later on he worked as a software designer and became a software architect in Nortel. He worked in No: 7 signaling projects and redevelopment of switching software with object oriented methodology (1992-1995). Therafter he became the software development director at GISMAP Inc., responsible for mobile applications (1997-1999). Since 2000 he is the director of engineering at Infotech, responsible for product development and technology management. He worked as a guest lecturer at Yeditepe University (2002-2009). His PhD research is focused on effective mapping of ADAS algorithms onto multicore architectures. He was awarded the "Wireless Developer of the Year" award, by Oracle Magazine in 2004.□