

4 finalist innovative service ideas for the GNSS LLAB Prize 2011 have been selected

The living labs interested into the open call for conducting a reality check pilot will receive the call documents. Contact Roberto Santoro; rsantoro@esoce.net

Geo-Coupon: A Coupon Demanding App Based On Where You Have Been

According to the statistics, over 332 billion coupons were distributed in the U.S. in 2010. Although traditional coupons are considered effective, they inevitably have some drawbacks, such as paper waste, unpredictable volumes of circulation, and non-customizable discount rates. However, digital coupons, including paper and paperless ones, are still not popular. In fact, they represent less than 2% of all coupons distributed.

This smartphone app for iPhone or Android devices is a new kind of channel for distributing digital coupons. In traditional coupon strategies, every customer is equally important. Everyone can get coupons without making any effort.

Geo-Coupon is an on-demand coupon app based on GNSS. It provides purpose-driven digital coupons according to predetermined rules, such as if the user has visited branch stores for a limited duration. Consumers' visits can be proved by executing Geo-Coupon, which verifies where they have been. This could also be synchronized not only to check in on Facebook, but also to promote branch stores visited via their social network. Once different goals are achieved by Geo-Coupon users, the corresponding reward -- coupons in the form of QR codes or bar code with unique serial numbers -- would be instantly available. Therefore, Geo-Coupon provides location-based coupon-demanding strategies which benefit both chain stores and consumers.

AHEAD - A Predictive Energy Management for Hybrid Electric Buses in Public Transportation

This project aims at minimizing the energy consumption and CO₂ emissions of hybrid-electric buses in public transportation. In hybrid buses, the energy management strategy regulating the power split between the battery and the engine greatly affects the amount of emitted CO₂. Simulations show that a hybrid-electric bus using a standard strategy emits only 15-20% less CO₂ than an equally sized diesel engine bus, even though it has the potential to save up to 25-30%. What is the problem with the standard strategy? The answer is that it does not use the battery and the engine efficiently. We have developed a new predictive strategy that uses a GNSS sensor to determine the actual position of the vehicle, making it possible to factor in information on the route ahead. Simulations show that if our new predictive strategy is used instead of the standard strategy, the hybrid bus emits 25-30% less CO₂ than an equally sized diesel engine bus. Thus, the new predictive strategy helps to prevent an additional 5-15% of CO₂ emissions.

We used the fact that buses in public transportation follow predefined routes. Therefore, relevant road data, such as the elevation profile, can easily be gathered and stored in an on-board map. When a bus actually travels a route, a GNSS sensor detects its current position. The new predictive strategy can then simply consult the on-board map and retrieve information on the route ahead. This helps to fully exploit the vehicle's CO₂-saving potential.

SDSL - Smart Device(s) for Smart Life - “meeting new people around you by matching your interests in that place at that moment”!

Smart Device(s) for Smart Life (SDSL) supports/replaces normal social interaction (personal, professional and more) by notifying portable device owners of nearby users, whose profiles are interesting for him. This solution facilitates human relations in an automatic, asynchronous and time/geo localized way with profile matching support and by the interaction with smart objects (pubs, events meeting points, public spaces) where people can attach their profiles and their requests.

Users who have created profiles on SDSL and have set their matchmaking parameters on the system can:

- Access to information on nearby profiles/objects with high matching rating to improve human relations;
- Retrieve relevant information/statistics about their social activity/interactions in the real world;
- Interact with smart objects/locations defined on the system (as virtual layer over real world) to improve matchmaking possibilities and interact in real environment supported by social 2.0 mechanisms (chat, multimedia exchange, messages etc.).

“In-App purchasing and advertising in enabling a new economy”: this new way of social-real-interaction on a wide community can guarantee strong revenues for ad-impressions, annual subscription top accounts and new marketing opportunities.

SportsCurve - Real Time Tracking

sportsCurve is a real-time GNSS-based tracking and tracing platform designed for competition organizers and professional athletes, but available for all GNSS consumers for everyday use.

We track and monitor all kind of physical data close or near to your body in correlation to the users most accurate position. The combination of state of the arte satellite positioning solutions and detailed mapping data, together with dedicated sensors, is a perfect basis for monitoring individual tracks, runs, rides and all other outdoor adventures – from the sea to the sky!