

New technologies - 5G networks, localisation data - and respect for privacy of their users

Friday 28 January 2022 12:15 (30 minutes)

Project LOCUS: Localization and analytics on-demand embedded in the 5G ecosystem, for ubiquitous vertical applications.

Context-awareness is essential for many existing and emerging applications. Context information greatly relies on location information of people and things. The goal of LOCUS is to design and develop a location management infrastructure not only capable of improving localization accuracy and security, but also to extend it with analytics, and extract value out of it, meanwhile protecting the end users' right to privacy. Localization, appropriate dedicated analytics, and their combined provision "as a service" will greatly increase the overall value of the 5G ecosystem and allow network operators to significantly expand their range of offered services, enabling comprehensive sets of user, location- and context-targeted applications. The intelligent integration of diverse technologies will open the way to many new applications, where devices, persons and things are detected, localized, and tracked with high accuracy, minimal implementation cost and privacy preservation (e.g., for crowd counting and flow monitoring). Accurate localization of terminals will also be exploited to improve network performance and to better manage and operate networks.

Presenter: Prof. BLEFARI-MELAZZI, Nicola