Maarten Weyn received his Ph.D. in Computer Science on the topic of Opportunistic Seamless Localization from the University of Antwerp, Belgium. He is an Assistant Professor at the Artesis University College of Antwerp, currently teaching the 3rd year bachelor courses Probabilistic Robotics and Digital Communication and Master course Real Time Locating System and Ambient Intelligence in the department of Applied Sciences: Electronics-ICT. He is the co-founder of the spin-off AtSharp.

Maarten Weyn's research activities concern the exploration and development of techniques and technologies for opportunistic localization, with a strong focus on Ambient Intelligent Environments.

Every technique and technology used for localization has its own specific properties and advantages, but also its specific disadvantages. One of the common disadvantages of many existing localization systems is the need for dedicated devices and proprietary infrastructure. Multi-modal systems which use the data coming from different systems and sensors will be the only possibility to allow affordable localization in different situations.

The future of localization systems most likely will evolve towards systems that can adapt and cope with any available information provided by mobile clients without the need to install any additional dedicated infrastructure. This type of localization is called opportunistic localization. It is defined as: *"An opportunistic localization system is a system, which seizes the opportunity and takes advantage of any readily available location related information in an environment, network and mobile device for the estimation of the mobile device absolute or relative position without relying on the installation of any dedicated localization hardware infrastructure."*

Technologies which are focussed on are RF based technologies, such as, Wi-Fi, GPS, GSM, WSN and more recently DASH 7. This in combination with inertial sensors or ultrasound and laser sensors.

A system was build which seamlessly fuses Wi-Fi, GPS, GSM, accelerometer and compass data to create an opportunistic seamless localization system. A dynamic fingerprint recalibration method was created which is patented in the United Kingdom and patent pending for Belgium and PCT. The outcome of this research is currently being commercialized through a spin-off.

Maarten Weyn has been involved in IARIA activities since 2010, in the Ubicomm 2010 and Ubicomm 2011 conference as session chair, reviewer, and panel speaker. As well as being reviewer for the IARIA International Journal on Advances In Intelligent Systems. Since 2012, he is general chair of Ambient Conference. He obtained a Best Paper award in both Ubicomm 2010 and Ubicomm 2011 conference.

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