Andárs Kőkúti

EIT Digital Budapest DTC

PhD topic: Self-organization in the future wireless and mobile networks **PhD supervisor:** Dr. Vilmos Simon, BME

Contact: kokuti@hit.bme.hu

'The EIT Digital Doctoral School gives me the opportunity to deepen my professional knowledge in Business Competence (with the help of the offered courses) and gain international experiences.'



Achievements & further plans

András is currently doing the 4th semester of his PhD studies at the Budapest University of Technology and Economics. The subject of his studies is **Self-organization in the future wireless and mobile networks**. He focuses on wireless mobile networks since a rising dimension of the user network traffic is brought forth in these networks. His results are published in many conference papers and in international journals as well, such as Sensors or Telecommunications Systems. András would like to go to the Imperial Collage London with the help of the geographical mobility programme, since he did some research there in 2013 and has a good relation with the head of the research group.

The management and optimization of the increasingly diverse and complex networks are becoming difficult in a concentrated fashion, incurring severe costs to the operators. Therefore, there are more and more self-organizing solutions that try to fix this problem in an autonomous manner, result in lowered costs and generate savings for the providers.

Educational status at Spring semester of 2016:

Reserach topic

TIn his research, András focuses on wireless mobile networks since today there is an increasing number of appreciated networks with no infrastructure. These networks are self-organizing, their communication is based on a peer-to-peer model, and a rising dimension of the user network traffic is brought forth in them.



The management and optimization of the increasingly diverse and complex networks are becoming difficult in a concentrated fashion, incurring severe costs to the operators. Therefore, there are more and more self-organizing solutions that try to fix this problem in an autonomous manner. The goal is to enable devices to effectively form self-organizing networks without any central control or background infrastructure.



The self-organizing mechanisms can assist in shortening the data accumulated in the network and in cutting down the operational costs. The distributed and self-configuring nature of these networks, combined with their simple and flexible deployment, make them appealing for a wide range of application scenarios including situations where traditional telecommunication solutions would fail (such as in emergency situations, sensors etc.).



doctoralschool.eitdigital.eu