



Post-Conference Presentation

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Introduction



Ljubljana , Slovenia
The Green Capital of Europe

Hosted by Jozef Stefan Institute
Faculty of Electrical Engineering
University of Ljubljana

Key Data

- 3 – minimum reviews per paper
- 3.73 – average reviews per paper
- 316 – number of TPC members
- 34 – countries of affiliation of TPC members
- 85.4% – TPC members from Europe, Middle East and Africa
- 10.1% – TPC members from Asia / Pacific
- 3.5% – TPC members from the Americas

EuCNC 2019

Valencia, Spain June 18 – 21, 2019

Introduction

2018 European Conference on Networks and Communications (EuCNC): Network Softwarisation (NET)

Profit-Aware Resource Allocation for 5G Sliced Networks

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Abstract—In this paper, we investigate the radio resource allocation for the 5G Sliced Network from the perspective of the network profit. Based on the quality of service requirements of the different network slices case, a Profit-Aware Resource Allocation (PARAA) is proposed. The Power-Bandwidth rule is employed in the cost estimation, while the optimization problem is formulated as a Mixed Integer Non-Linear Problem (MINLP) and the Binary Particle Swarm Optimization (BIPSO) is used to solve the profit resource allocation problem. In respect to this, the performance of the algorithm is investigated via intensive Monte-Carlo based simulations taking into consideration the effect of coverage radius, number of users per slice and the allocated transmit power of each user.

Keywords - 5G, Network Slices, Binary Particle Swarm Optimization, Network Profit, Monte-Carlo.

that run on a physical mobile communication system. It is important to note that NS cannot exist in isolation, it is closely linked with the idea of virtualized multi-tenancy. The roles of the Mobile Virtual Network Operators (MVNO) and the InPs are logically split. With virtualized multi-tenancy, several MVNO otherwise known as Tenants can share the same physical radio access network owned by an Infrastructure Provider (InP).

The InP possesses the network resources such as the spectrum, power, physical infrastructure such as the tower, shelter among others. These network resources are allocated to distinct MVNOs taking into consideration that the said MVNOs must be isolated and independent from each other. The InP thus ensures the maximum utilization of the physical Infrastructure. The InP invests the bulk of its money to leasing



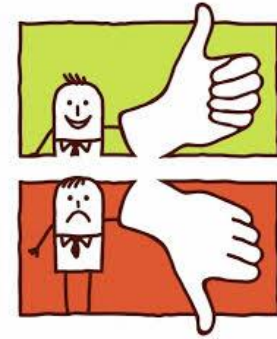
Benefits



Networking with Experts



Travel



Feedbacks



Presentation Skill



Learn new tipsHarzing's Publish or Perish

Take-Aways



Collaboration

A lot is achieved through joint research



Testbed

Implementation of 5G using the different Testbed



Graphical User Interface

The use of GUI in Algorithm modeling and development



Matlab

If you are using Matlab...don't give up. There are a lot of researchers out there still working with Matlab



CRG

We are not doing badly as a research group and Center.

Research Areas



Machine Learning in 5G Network Slicing



Network Management & QoS 5G Network

Ochestration etc



Creation Phase in Network Slicing



Smart Energy /Energy Infrastructure using 5G



Latency in 5G Network / D2D Networks



Satellite Solutions for the 5G Networks of Networks

Research Projects



5G TANGO



MONICA



5GinFIRE



EU HORIZON2020 MATILDA



5G-VINNI





THANK YOU