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## Our partners



## The SCAVENGE project has started!

We are reaching out with our first newsletter :-). This year has been really exciting and it looks like the following ones will be thrilling too!!! Long story short, we had our first training school in November 2016, in Barcelona, Spain. During the school our PhD students have met for the first time, they received useful tutorials, a promo video has been shot and is now available through our **You Tube** channel. Almost all Early Stage Researchers (ESRs) are aboard, a few more kinks and the crew will be complete. We are now in the process of organizing our second training school in London (March 2017).

## A Sneak Peek Into a Hectic 2016

2016 has been really hectic. We started creating

- a logo (see the top of this newsletter),
- a nice and functional Website (<http://www.scavenge.eu>),
- a *digital identity* for the project (slides, multimedia, etc.),
- a You Tube channel,
- a Twitter channel.

Most importantly, we have been very busy with the hiring process, almost all the ESRs are with us (13 out of 14), the last student is being hired as we write here. Unfortunately, we had some VISA problems which took longer than expected, but we are finally getting there. We had our first training school in November 2016, hosted by CTTC in Barcelona. The school has been exciting, featuring lots of high quality tutorials on optimization techniques, both convex and stochastic, wireless communication systems and trends. Plus, our students had a chance of introducing themselves and getting together for the first time. Quite a few interactions are already happening and we are sure these will lead to nice technical results, as well as mutual enrichment.

*We are currently heading toward the second training event, which will be held in London, in March 2017. Stay tuned!*

## An easy way to stay in touch

The fastest and perhaps most entertaining way to stay in touch with us is through our **You Tube** channel. Just go to **You Tube** and search for **SCAVENGE ETN**. Our channel will be constantly updated with multimedia content including:

- Promo videos,
- Video lessons & tutorials,
- News from our students,
- Our technical achievements,
- Talks to public events, etc.

Right now you can find the videos from our first training event in Barcelona and our promos. Soon, we will publish more videos, where our students individually introduce themselves, stating their drive, expectations and describing their project.

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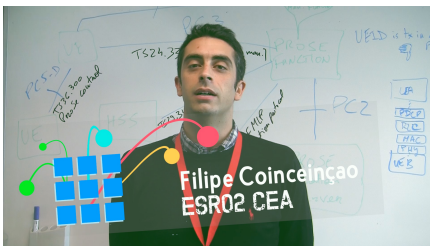
## Introducing our talents

### Ibrahim Fawaz (ESR01)



Ibrahim Fawaz is a PhD student in Telecommunications systems at CEA in Paris. He received a telecommunications engineering diploma from the Lebanese University (2011-2016) and a master degree in digital telecommunications systems from Telecom Paristech and Pierre and Marie Curie University (2015-2016) in the context of a double degree program. The topic of his PhD is to study Offloading strategies for mobile devices with energy harvesting capabilities. His research will investigate optimal data transmission policies for resources scheduling and computation offloading under energy harvesting constraints.

### Filipe Conceição (ESR02)



Filipe Conceição was born in Lisbon, Portugal. He obtained his MSc in Electrical and Computer Science Engineering from New University of Lisbon 2011 with a focus in telecommunications. He has several years working in the telecom industry. In parallel, he spent considerable time being an assistant teacher at New University of Lisbon. Located in Paris, he currently researches in CEA and Telecom Sud-Paris for the coming 5G mobile network, under the SCAVENGE project, with focus on security aspects.

### Hoang Duy Trinh (ESR03)



Hoang Duy Trinh received the B.Sc. degree in Information Engineering and the M.Sc. degree in Telecommunication Engineering from University of Padova, in 2013 and 2015, respectively. He is currently pursuing the Ph.D. with the Polytechnic University of Catalunya. In September 2016 he joined the Centre Tecnològic de Telecomunicacions de Catalunya as a researcher for the SCAVENGE project, under the Marie Skłodowska-Curie Actions programme. His research interests are in the areas of 5G, mobile big data and energy harvesting networks.

### Dagnachew Temesgene (ESR04)



I received BSc. in Electrical and Computer engineering in 2012 from Bahir Dar University, Ethiopia. In 2014, I enrolled in the Erasmus Mundus Joint Master Program in Pervasive Computing and Communications for Sustainable Development (PERCCOM). PERCCOM is a joint program among Universities in France, Finland and Sweden and I have graduated with a Joint Master's degree in August 2016. Starting from November 2016, I am working as an Early Stage Researcher in the SCAVENGE project at CTTC communication networks division.

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## Outline

### Our vision

- Energy sustainability is key to future mobile networks due to their foreseen capacity upsurge.
- SCAVENGE introduces the concept of *Sustainable 5G Mobile Network*.
- Environmental energy can be used to power the mobile system elements like base stations, mobile terminals, sensors and machines.

### Our mission

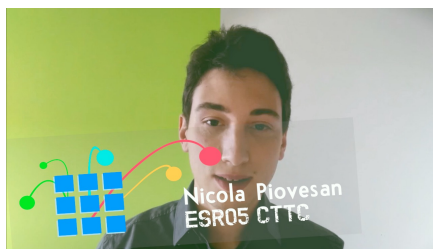
- SCAVENGE's objective is to create a training network for early-stage researchers (ESRs) who will contribute to the design and implementation of eco-friendly and sustainable next-generation 5G nets.
- SCAVENGE encompasses theory along with the optimisation and proof-of-concept implementation of base stations and mobile elements as well as their integration with the smart electrical grid.

### Our team

- The attitude of SCAVENGE's industrial partners towards the strong investment in R&D and their strategic vision are fully aligned with the mission of this project.
- The ESRs will have a unique opportunity towards professional growth in light of dedicated cross-partner training activities and through the interaction with the international Partner Organisations, which also include relevant stakeholders in the envisioned market.

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### Nicola Piovesan (ESR05)



My name is Nicola Piovesan, I received the B.Sc. degree in information engineering and the M.Sc. in telecommunication engineering from the University of Padova, Italy, in 2013 and 2016, respectively. Currently, I am pursuing a PhD at the Technical University of Catalonia (UPC). In September 2016, I have joined CTTC as an ESR in the framework of the H2020 MSCA SCAVENGE project. My current research interests include energy harvesting in wireless communications, energy transfer systems and resource allocation in wireless communication systems.

### Angel Fernandez Gambin (ESR06)



I am Angel Fernandez Gambin, I was born in Spain in 1992. I received my Bachelor and Master degrees in Telecommunications engineering from the Technical University of Cartagena (Spain) in 2014 and 2016, respectively. Currently, I am an Early Stage Researcher with the European SCAVENGE project, and I am carrying out a Ph.D. at the University of Padova (Italy). My project is about studying the interactions between future cellular networks and the smart electrical grid, in the presence of renewable energy sources.

### Elvina Gindullina (ESR07)



I am Elvina Gindullina. I was born in Russia in 1991. I received my master's degree in applied mathematics and computer science from Ufa State Aviation Technical University in 2015, and I have also worked as a programmer there for a while. Currently, I am pursuing a PhD degree at the University of Padua (Italy) in the department of Information Engineering, where I focus on development of battery management system for energy harvesting devices.

### Mehmet Emre Ozfatura (ESR08)



I was born in Izmir, Turkey, in 1990. I received my B.Sc. in Electronics Engineering with Math minor and M.Sc. in Electronics Engineering from Sabanci University (Turkey), in 2012 and 2015, respectively. I am currently pursuing a Ph.D. degree at the Imperial College of London, where I am working as a member of the Intelligent Systems and Networks (ISN) group. My research interests are centered around video streaming applications and co-operative mobile networks. In SCAVENGE, I am doing research on energy efficient mobile networks.

### Nitish Mital (ESR09)



I am Nitish Mital from India. I was awarded my Bachelors and Masters degree from Indian Institute of Technology Bombay in 2015, in Electrical Engineering and Communications & Signal Processing, respectively. My background is wireless communication, signal processing and information theory. I also co-founded a startup in India working on IoT solutions for Smart Cities in 2015. I am

currently part of the SCAVENGE ITN, and I am pursuing a PhD at Imperial College of London.

### Vianney Anis (ESR10)



Coming from an engineering background, in implementation on embedded system of Digital Signal and Image Processing system, I am currently working as a PhD student at the University of Strathclyde, on the design and implementation of base-station using heterogeneous networks to improve the quality of experience as well as reducing the power consumption by using clever user assignment and low-power base-station design.

### Thembelihle Dlamini (ESR11)



I am Thembelihle Dlamini (Lilhe for short). I received my Bachelor of Engineering (Electronics) at the University of Swaziland, in 2011. In 2014, I completed my Master's degree in Electrical Engineering and Computer Science (EECS) at National Chiao Tung University, Taiwan. I am currently pursuing a PhD at the University of Padova, Italy and I am at the same time a researcher at Athonet, under the EU SCAVENGE project. My research interests are in Wireless communication system design, Core Network management procedures for 5G networks, especially focusing on NFV and SDN.

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### Marco Zambianco (ESR12)



I was born in Montebelluna, Italy. I received the B.Sc. degree in Information Engineering and the M.Sc. in Telecommunication Engineering from the

University of Padova, Italy, in 2014 and 2016, respectively. I am currently pursuing a PhD degree at Imperial College London under the European SCAVENGE project and I

am also working at Toshiba Telecommunications Research Laboratory located in Bristol as an early-stage researcher. My research topics are centered around the study and the design of energy harvesting techniques for future mobile networks.

### Ioana Suciuc (ESR13)



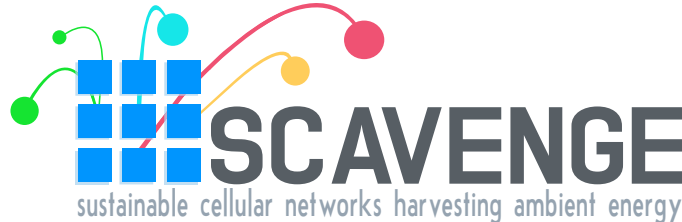
I was born on September 28, 1991 in Reghin (Romania), a city in Transylvania that is well known for manufacturing musical instruments, especially violins. Between 2006 and 2010 I attended high school classes at Grup Scolar "Petru Maior" in Reghin. In 2014, I graduated with honors from the Military Technical Academy of Bucharest, achieving a bachelor in electronics engineering and I continued my master's studies at the "Politehnica" University of Bucharest and CentraleSupélec (Paris), earning two master degrees in Mobile Communications and Advanced Wireless Communications, respectively.

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## SCAVENGE ID (<http://www.scavenge.eu/>)

Funded by the EU in the framework of the H2020 Marie Skłodowska Curie Action - Innovative Training Networks.

1. **Call:** H2020-MSCA-ITN-2015
2. **Acronym:** SCAVENGE (project No. 675891)
3. **Duration:** 48 months
4. **Start date:** 2016-02-01
5. **Project Coordinator:** Paolo Dini - CTTC
6. **Project Officer:** Nina Poumpalova - REA



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*"The world has enough for everyone's need, but not enough for everyone's greed." — Mahatma Gandhi*