Robin Gerzaguet

Présentation

I am an associate professor in Ecole Nationale Supérieure des sciences appliquées et de technologies (**ENSSAT**) and a researcher in **Granit** Team of **IRISA** (Institut de Recherche en Informatique et Systèmes Aléatoires).

Parcours

- Between 2015 and 2017 I have been a research engineer at **CEA-Leti**.
- Ph.D. degree in both the Gipsa-lab (laboratoire de recherche mixte du CNRS, de Grenoble INP-UGA et de l'Université de Grenoble Alpes) involved in the CICS team and ST-Microelectronics in 2015.
- I have received the degree in **electrical engineering** from Grenoble-INP, France, in 2011

Activités de recherche

My research interests are in **signal processing techniques and hardware architectures.** It includes works on digital communications such as multicarrier waveforms, channel estimation, synchronization, and digital RF impairment compensation. It also contains works on embedding signal processing techniques and lightweight artificial intelligence.

Many of my works have been conducted or validated on **Software Defined Radio** (SDR) and FPGA-based hardware architectures. I also have a strong interest in more minimalist architectures, such as microcontrollers.

Contact

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Mon apport au sein du projet RIS3

My research topics are closely related to telecommunications, and the challenges addressed by RIS3 strongly resonate with many of my works.
At ENSSAT, I am responsible for courses and modules dedicated to wireless communications. Training the engineers of tomorrow to tackle the issues of connectivity and future networks is a fundamental mission. This involves not only providing them with solid technical knowledge but also raising their awareness of key challenges such as digital sovereignty, security, and sustainability.

As part of the RIS3 project, I am **responsible for actions related to engineering-level training.** These actions aim to integrate technological advancements and the specific challenges of intelligent networks into academic curricula, ensuring a perfect alignment between the skills developed and the needs of industrial and research sectors.

Finally, I am convinced that addressing the challenges of RIS3 requires promoting interdisciplinary approaches and emphasizing minimalist, energy-efficient architectures, such as those based on microcontrollers. These solutions will be fundamental to building the networks of tomorrow—networks that are intelligent, secure, and sustainable.

Publications

See https://people.irisa.fr/Robin.Gerzaguet/publications/

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