Ph.D. Position at Microelectronics Institute of Seville IMSE-CNM (University of Seville, CSIC), Spain

Research line: Post-quantum crypto-biometrics with hardware security for digital identity wallets

Related projects:

HighLoAwallet: Crypto-biometric techniques and hardware-enabled solutions for self-sovereign identity wallets with high level of assurance.

Hard-ID-wallet: Proof of concept of hardware security solutions required by the cryptography and biometrics of digital identity wallet.

VIPS-ID: Verifiable, Private, Distributed, and Secure Identification of People and Things.

LICORICE: reLiable and sCalable tOols foR self-sovereign identity and data proteCtion framework.

• Period: 4 years, to apply until 11 September 2024, to start on November 2024.



- Gross salary: 23.000 € (first year), 24.100 € (second and third years). The amount will be increased for the fourth year. And economic support for equipments, training programs, publications, conferences and research stays.
- Key words: Cybersecurity, electronic transactions, digital identity, digital identity wallets, self-sovereign identities, privacy, cryptobiometrics, PUFs, hardware security, post-quantum cryptography, trusted execution, and mobile devices.
- Objectives: Design of post-quantum crypto-biometric and hardware-enabled solutions to manage people identities with high level of assurance in the context of digital identity wallets. Technology transfer and research publications.
- Profile: University Degree with at least 300 ECTS credits or Master in the area of Physics, Mathematics, Computer Science, Electronics, Telecommunications, Cybersecurity or similar. Strong interest in Cybersecurity from a hardware and crypto-biometric point of view. Programming skills. Good knowledge of mathematics (for cryptography), and signal and image processing (for biometrics). High-level in English. Self-motivation and commitment to do a Ph.D.

If interested, please submit your application (CV and motivations) or contact to: <u>lumi@imse-cnm.csic.es</u> (Prof. Iluminada Baturone) and <u>arjona@imse-cnm.csic.es</u> (Prof. Rosario Arjona)

