## PhD Student Positions at the Neuromorphic Group of Sevilla Microelectronics Institute

The Neuromorphic Group (<a href="www.imse-cnm.csic.es/neuromorphs">www.imse-cnm.csic.es/neuromorphs</a>) at the Sevilla Microelectronics Institute (IMSE <a href="www.imse-cnm.csic.es">www.imse-cnm.csic.es</a>), is searching for highly motivated PhD student candidates to focus their research in relation to on-going research projects (<a href="http://www2.imse-cnm.csic.es/neuromorphs/index.php/Projects">http://www2.imse-cnm.csic.es/neuromorphs/index.php/Projects</a>). We seek candidates with interest in some of the following activities:

Activity 1: microchip (ASIC) analog and mixed-signal design (schematics, simulations, layout, using cadence). Applications may include neuromorphic systems, biomedical systems, memristor based computing systems, deep neural networks, spiking neural networks, or vision sensors. Preliminary experience is a plus, as well as in either "Activity 2 or 3" would be an extra plus.

Activity 2: Digital circuit design (vhdl/verilog), either for FPGA or ASICs, to complement applications of systems in "Activity 1" and corresponding test setups. Preliminary experience is a plus, as well as in either "Activity 1 or 3" would be an extra plus.

Activity 3: Computational (software) interest in Artificial Neural Networks (Keras, Pytorch, TensorFlow, Torch, etc), learning algorithms, benchmarking, etc. with interest in Spiking Neural Networks. Preliminary experience is a plus, as well as in either "Activity 1 or 2" would be an extra plus.

- Salary: gross minimum 25k€, negotiable depending on experience.
- Deadline: no fixed deadline, but we seek candidates able to start early Autumn 2022 or before.

IMSE is a mixed institute of the Spanish Research Council (<u>www.csic.es</u>) and the University of Sevilla (<u>www.us.es</u>). Successfull candidates will have access to facilities and tools of both Institutions.

Interested candidates please submit CV to: prof. Bernabé Linares-Barranco (<u>bernabe@imse-cnm.csic.es</u>) (<u>www.imse-cnm.csic.es</u>/~<u>bernabe</u>)





