



IRIDAE s.r.l. is an Italian startup with expertise, knowledge and IP in the medical imaging sector. Our experience spans the whole medical imaging product stack, from sensors, to front-end electronics, to data acquisition and processing, to image reconstruction. IRIDAE's proprietary PET detector embedding artificial intelligence technology brings disruptive innovation in the clinical and preclinical molecular imaging field, producing superior image quality at much lower costs, and enabling cost-effective total body scanners.

We are currently building the team that will design and industrialize next-generation, full-stack AI-enhanced PET scanners. Currently, we are looking for the following two profiles:

1. **Detector scientist:** this position will be involved in the design, development and test of next-generation light detectors. The candidate must hold a Master degree in Physics, Electronic Engineering or a related field.

Requested skills/experience:

- a. Photodetectors and scintillating crystals
  - b. Firmware design and FPGA programming VHDL/Verilog
  - c. Digital and analog electronics
  - d. Experience with PCB design and board bring-up is a plus
2. **PET physicist:** this position will be involved in the Monte Carlo simulation of IRIDAE's medical imaging devices and in the design and development of image reconstruction software. Large total-body PET scanners pose numerous software challenges like the development of incredibly efficient simulation and image reconstruction methods and we are looking for a skilled candidate that will help us overcome them.

The candidate must hold a Master degree in Physics, Computer Science or a related field, with relevant experience in Monte Carlo simulations and physics modelling.

Requested skills/experience:

- a. C++ and Python
- b. High-performance scientific computing, memory management, cache management, parallelization techniques
- c. Experience with GPU programming is a plus

To apply, please send your CV and a cover letter to [info@iridae.it](mailto:info@iridae.it). Selections will start in the second half of 2022.