

# Digital Design-/FPGA- Engineer

## JOB OFFER

### The Company

3Brain is a young, fast-growing, dynamic company focusing on brain technologies, one of the most fascinating research and business sectors with multiple applications and impacts on human life. 3Brain's mission is to provide state of the art technology to support life science research and improve human health. In particular, 3Brain develops, manufactures and distributes high-quality instruments based on our patented CMOS multi-electrode array, a high-resolution neuro-electronic chip. The company is headquartered in Switzerland nearby Zurich, has an SW R&D office in Italy, and has installed its products in laboratories and pharma companies worldwide also thanks to its network of distributors covering among others US, Canada, China and Japan.

More info: <http://www.3brain.com/about.html>

### Job description

For the next expansion step, 3Brain is looking for a full-time junior FPGA engineer to reinforce our R&D team in Wädenswil, Switzerland. You will help developing new embedded systems for high-speed data acquisition devices and improve and maintain the existing product lines. You will be responsible for data fetching from high-speed ADCs, for the pre-processing of sensor data, signal enhancement as well as more complex signal processing for hardware-accelerated feature extraction and for providing necessary peripheral infrastructures (i.e. USB, ETH, SPI, UART, etc.).

In particular, your tasks involve:

- Creating hardware-accelerators for our embedded systems and architectures
- Design and implement the HW infrastructure for an embedded device handling Giga-bits of data, such as data acquisition through DMA, memory management, control of peripheral devices through SPI, I2C, SDIO, WLAN, USB, etc.
- Maintenance and extension of Python development and test framework
- Help in the implementation of development- and production-test-tools



## Your Qualifications

- MSc in Electrical Engineering
- VHDL proficiency
- FPGA IDE, such as Quartus Prime or Vivado Design Suite, and ModelSim
- Embedded system expertise (i.e. SoC)
- Good background in signal processing
- Fluency in English
- Initiative, independence and ability to communicate and work effectively with other team members in a multicultural and international environment

## What We Offer

- A dynamic and stimulating work environment in a young, emerging company focusing on one of the most fascinating research fields, brain technologies
- Possibility of professional growth, both technical and economical
- Flexible work hours
- Place of work Wädenswil, Switzerland

To apply send an email with CV and short motivation letter to [info@3brain.com](mailto:info@3brain.com), subject: FPGA Engineer

