

Electronics Engineer

Job Offer

The Company

3Brain is a Swiss deep tech company working on cell-electronic interfaces that link biological networks to computers via custom-made semiconductor microchips. Our mission is to empower life scientists to probe intelligent networks, accelerate biomedical discoveries for the benefit of patients, and create a future more exciting than the present. Our interdisciplinary team of scientists and engineers are constantly pushing the boundaries of engineering for life's complexities. We are ambitious, fast-growing and love to explore. The company's cutting-edge products are used in laboratories and pharma companies worldwide. 3Brain is headquartered in Switzerland nearby Zurich, has a Data Science and Discovery Unit in Genova, Italy, and an operational unit in the US.

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

Job description

For the next expansion step, 3Brain is looking for a full-time Hardware electronics engineer to reinforce our R&D team. You will help develop embedded systems for high-speed data acquisition devices, including tasks such as system engineering, schematics design and layout, testing and verification. You will also contribute to the current device's life-cycle management, including activities such as automation, production testing and optimization.

In particular, your tasks involve:

- Designing high-speed embedded systems and architectures for products based on high-resolution microelectrode arrays
- Designing low-level current/voltage instrumentation tools to operate Micro-electrode Arrays (MEA)
- Design and implement hardware systems and sub-systems (PCBs), including high-speed ADCs, microcontrollers and FPGA-SoMs, power supplies, etc.
- Bringing-up, testing, measuring, characterization and validation of electronic systems



- Design and development of production test tools
- Make, assemble, debug and test demonstrators and prototype devices
- Documentation (engineering, production, QA, etc.)

Required Qualifications

- Independence and ability to communicate and work effectively with other team members in a multicultural and international environment
- BSc/MSc in Electrical Engineering
- Minimum of 3 years of professional experience in HW Design
- Design of analog electronics and high-speed digital systems (Simulation, Schematics, HDI Layout)
- Detailed understanding of PCB-manufacturing
- Good understanding of EMC compliance and mechanical integration
- Practical and industrial hands-on experience (e.g. prototype soldering, setting up test-benches, transfer and scale-up to mass production, etc.)
- Prototyping and testing (i.e. for bring-up, debugging and production)
- Background in basic signal processing (i.e. sampling, filtering, aliasing, etc.)
- Fluency in English

Additional Qualifications

- Knowledge of Python
- Microprocessor programming

What We Offer

- A dynamic and stimulating work environment driven by a desire to build transformational technologies to help others.
- A young, fast-growing company with plenty of opportunities for personal growth and development.
- Great challenges and adventures in both technical and economical fields.
- Working place: **Pfäffikon SZ, Switzerland**. It is a lakeside village just outside of Zurich, the country's main cultural, financial and business center.

To apply send your CV and short motivation letter to hr@3brain.com, subject: [Electronics Engineer](#).

