Research engineer position in mechatronics in neuroscience

We are looking for a motivated, curious, and adventurous research engineer to join the Cortical Circuits Laboratory led by Ede Rancz at the Mediterranean Institute of Neurobiology (INMED) in Marseille, France. The team is studying neuronal computations underlying behaviour in the mouse visual cortex. We recently developed a rotation platform for head-fixed mice (https://ranczlab.github.io/RPM) which can be combined with visual virtual reality and neuronal recordings to study predictive processing in behaving mice.

The ideal candidate should have a proven track record in developing open-source research equipment in the field of systems neuroscience.

Required competences:
- experience with 3D CAD software (Solidworks, Autodesk Inventor or similar) and rapid prototyping (3D printing, laser cutting)
- working knowledge of electronics and microcontrollers (e.g., Arduino)
- ability to communicate effectively with both biologists and engineers / developers
- interest in brain research, especially in mouse behaviour and neuronal computations

Desired competences:
- MSc or PhD level background in systems, circuits or behavioural neuroscience
- working knowledge of Python
- experience with neuronal recordings, virtual reality, DeepLabCut or Bonsai-Rx

The post is funded by an A*Midex grant until December 2024, with a possibility for a permanent IR/IE position afterwards. Applications are considered on an ongoing basis. Starting time is as soon as practicable.

The post will be based at INMED with access to the expertise at the CENTURI Multi-engineering platform and the Makerspace. In addition, the successful candidate will work closely with NeuroGears, a London-based creative research group combining robotics and neuroscience. The city of Marseille is a unique gem in the heart of the Mediterranean, culturally diverse and surrounded by magnificent nature.

Interested candidates should send a short motivation letter, CV, and contact details of 2 referees to ede.rancz@inserm.fr. Informal enquiries are encouraged.

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