

Scientific collaborator / R&D Scientist at *Spectrace*

The Laboratory of Integrated Performance in Design (LIPID) at EPFL, Switzerland is looking for a scientific collaborator/R&D scientist to support the scientific, technological and business development of its spin-off *Spectrace*, in collaboration with the Wyss Center.

The [LIPID](#) research group engages in questions of energy, health, comfort and perception and their interactions in architectural design, with an overall strategic goal of fulfilling building occupants' needs and a core focus on daylighting strategies.

The [Wyss Center](#) is a non-profit research institute in Geneva with a mission to bridge academia and practice through applied projects related to bio- and neuro-engineering.

At *Spectrace*, we seek to improve occupant health, wellbeing and productivity through innovative data collection methods and analytics. The core innovation of our spin-off lies in the development of a new wearable sensor, the *Spectrace* device, able to collect exposure to light with a spectral resolution, alongside selected indoor environmental quality (IEQ) data.

By treating the human as the sensor node, we are able to dynamically sample one's indoor and outdoor lighting environment based on real-time use and accounting for individual lifestyles, and to put it in context by simultaneously gathering complementary information about other environmental factors such as temperature, humidity and CO₂ content for instance. By relying on the most recent findings in the field of circadian photoreception, the objective is to associate contextualized light exposure (over the 24h cycle) to expected outcomes regarding wellbeing and health. Through advanced analytics, *Spectrace* thus aims to empower stakeholders by ensuring that the built environment is also a human environment.

We are looking for a new collaborator to work on expanding the scientific scope to include sleep and/or other neurobehavioral aspects, and on furthering the technological development of the data analytics platform and the business development of the project as a whole.

Job responsibilities

- Contribute to the technological and scientific improvement of a second-generation *Spectrace* prototype and data analytics platform
- Perform laboratory and field tests of the prototype
- Develop new analytics of the data collected with the device
- Contribute to the development of the content and data visualization of the website and sensor-associated app
- Contribute to the development of the go-to-market strategy
- Reinforce and enrich the outreach to potential investors/clients
- Assist the transition from prototype to industrial production

What we are looking for in a candidate

- PhD in data science, neuroscience, sleep science, biomedical engineering or related fields, OR a master degree in the above fields with 5+ years of relevant industry experience
- Knowledge or experience about wearable devices is an advantage
- Interest in entrepreneurship and business-oriented mentality
- Ability to work with a high degree of autonomy
- Excellent verbal and communication skills (English is required, French or German are a bonus)
- A passionate and creative mind, eager to bridge academia and industry

What we offer

- Opportunity to work in a young start-up and shape its future role in a developing industry
- An interdisciplinary environment (LIPID lab) in a top-ranked engineering school (EPFL) and access to the network of collaborators from the Wyss Center
- A competitive salary commensurate with skills and experience, subject to the EPFL pay scale

Employment type

Full-time

Start date

May 2021 at the latest

Duration

1 year

To apply

Send the following documents merged into a single PDF before **December 10, 2020** to apply@spectrace.ch:

1. Your CV/Resume
2. A letter of motivation specifically detailing your scientific background in relationship to the project and your motivation for entrepreneurship
3. Contact information of 3 references
4. A link to your personal webpage (or other personal online identity) or a short paragraph telling us more about you (hobbies, interests, etc.)
5. Links to or description of any relevant past projects highlighting your capacity to add value to *Spectrace*