

Postdoc, Neuromorphic Computing Hardware

Are you interested in neuromorphic computing hardware? Do you want to build an excellent science career and work at the interface of academy and industry? VTT might be just the place for you.

VTT is one of the leading applied research organisations in Europe. What unites us are curiosity, a passion for learning and a purpose: to solve the biggest challenges of our time and turn them into sustainable growth and well-being. Our cross-disciplinary community of over 2000 brilliant minds is focused on creating impact through science-based innovation. Get to know us further by exploring VTT's research infra at [VTT World](#).

We are looking for an ambitious and results-oriented researcher with a strong background in mixed-signal integrated circuits to join our Sensor System Integration team.

As a Postdoctoral Scientist, you will have a key role in the development of new bio-inspired circuits for sensory signal processing, with a focus on high performance and low energy consumption. Ideally, you will conduct the design from the concept to implementation to verification through measurements and dissemination of the results.

Depending on your experience and interests, it is possible to expand the responsibilities below.

Your responsibilities as a Postdoc:

- Design of signal processing neuromorphic circuits and systems and their implementation in VLSI CMOS chips
- Plan and conduct characterization of the fabricated chips
- Planning and preparations of new projects as well as project management
- Communication and collaboration with other experts within and outside VTT
- Dissemination of the results through scientific publications and conference presentations.

We are looking for a person with:

- Ph.D. in electronics
- Hands-on experience in design of analog/mixed-signal integrated circuits
- Experience in design of neuromorphic hardware
- Knowledge of AI/ML techniques and algorithms is a big plus
- Experience in design of sensor readout electronics is a plus
- Excellent communication skills in English.

As a person, we hope that:

You are a fast learner capable of working in a flexible and independent manner. You are eager to work with new topics with open-minded and curious attitude. You pay attention to details as well as understand the big picture and provide input at all stages. You contribute to a positive team spirit.

With VTT, you will enjoy:

- **Visionary work in technology.** We offer positions at the cutting-edge of technology and engineering from next generation microelectronics and quantum technology to automation and robotics and more. Our research agenda is dedicated to creating sustainable growth by solving systemic and technological challenges, so your work will go towards creating real, positive impact. Read more about our strategy – [the path of exponential hope](#).

- **Fascinating projects, excellent research environment.** Our researchers get to work on a combination of cutting-edge academic research and applied customer projects, both locally and internationally. At VTT, you'll have state-of-the-art research facilities at your disposal, such as Micronova, the Finnish research infrastructure for micro-, nano- and quantum technologies.
- **Great career opportunities, superb colleagues.** At VTT, excellence in research is a strategic priority. We offer long-term positions and stable career paths in top-level research. People tend to stay with us over 10 years since there are always new roles and responsibilities to grow into. Collaborating in a cross-disciplinary community with superb colleagues is a source of learning, inspiration, and fun. Read more about [our organisational culture](#) as the builder of the world's most meaningful place to work.
- **Support for your well-being.** Our people are our main asset, so we take good care of them. We aim to nurture great team spirit and leadership and offer versatile well-being services to enable a good work–life balance. On top of 6 weeks of paid holidays, we offer exercise and culture benefits, hobby clubs, and voluntary well-being services such as meditation programmes and trainings on cognitive ergonomics.

Apply now and join our community of brilliant minds!

Please send your CV and application with your salary expectations via [our recruitment system](#) as soon as possible but **at the latest by 31 July 2023**. We will process applications as they come in and fill in the position as soon as we find the right candidate.

Interested and want to hear more?

For further information, please contact Research Team Leader Jacek Flak, Jacek.Flak@vtt.fi, +358405366934 on 06.06.2023 at 14:00-16:00 or 14.06.2023 at 14:00-16:00 (Europe/Helsinki).

We look forward to hearing from you!

Apply between **15 May 2023** and **31 July 2023 23:59 (Europe/Helsinki)**

Employment type: Full-time, Fixed-term (2 years)

Location: Tietotie 3, Espoo, Finland

VTT

VTT is a visionary research, development and innovation partner. We drive sustainable growth, tackle the biggest global challenges of our time and turn them into growth opportunities. We go beyond the obvious to help the society and companies to grow through technological innovations. We have over 75 years of experience of top-level research and science-based results. VTT's turnover and other operating income is 258 M€. VTT is at the sweet spot where innovation and business come together.

VTT – beyond the obvious.