JOBS

The Foundation for Research on Information Technologies in Society (IT'IS), an independent, nonprofit research organization closely associated with the Swiss Federal Institute of Technology (ETH) Zurich, is currently seeking

PostDocs and/or Senior Engineers in Electromagnetics

to strengthen our computational and experimental electromagnetics research team.

IT'IS, together with its partner organizations Schmid & Partner Engineering AG (SPEAG), ZMT Zurich MedTech AG (ZMT) and TI Solutions AG, forms the Zurich43 alliance. Z43's dedicated mission is to expand the knowledge and technology for the (i) characterization, optimization, and application of the electromagnetic (EM) near-field, (ii) predictive modeling of interactions between physical agents and physiology in complex anatomies, and (iii) medical applications.

Your challenges:

- Participation in a range of research projects in electromagnetics (theory, modeling and experiments) and its applications (wireless systems, magnetic resonance imaging, novel therapies applying EM fields)
- World-class scientific contributions to the theory, modeling, optimization, and application of the EM near-field
- Development of novel instrumentation, computational methods, and characterization procedures
- Participation in national and international standard activities (IEC, IEEE, etc.)
- Collaboration with external research partners and provision of hardware support for Z43 customers

Your strengths:

- PhD in Physics or Electrical Engineering
- Experience with EM simulation software (e.g., Sim4Life, COMSOL, ANSYS) and/or EM measurement instruments
- Experience in programming in C++ and/or Python
- Knowledge in one of the following areas is a plus: wireless communication systems, radiofrequency antenna simulation and measurement, electrodynamics, numerical simulation of EM fields, biomedical engineering, error analysis, and uncertainty conventions
- Strong sense of responsibility and highest quality standard of work
- Self-motivation, good organizational and communication skills, impeccable attention to detail, friendly personality and team-spirit, sensitivity to customer needs, and ability to manage several tasks simultaneously, work independently in a fast-paced environment, and to meet tight deadlines
- Good to excellent command of the English language (both written and spoken), ability to communicate in German a plus

Our offer:

- Stimulating environment for innovation at the forefront of our research areas and key technologies
- State-of-the-art laboratories, high-performance computing clusters, and production facilities
- Vibrant and open R&D culture thanks to a diverse and creative mix of people from across the globe with various backgrounds in physics, electronics, mathematics, biology, etc.
- Colleagues who are smart, competent, and passionate about valuable, cutting-edge work and who strive to meet high ethical standards

Applications will be accepted until the position is filled. Direct applications are preferred; applications submitted via recruitment agencies are discouraged. Please note that incomplete applications will be disregarded.

Please send your application documents (in English) consisting of motivational letter, tailored CV (max 2 pages), diplomas, transcripts (with grades), work certificates and/or reference letters (if available) to:

Zurich43, Yvonne Maeder, Zeughausstrasse 43, 8004 Zurich, Switzerland, Phone: +41 44 245 96 96, jobs@z43.swiss

Informal enquiries are welcome and should be directed to Dr. Sven Kühn.