RESEARCHER – INDUSTRIAL IOT (M/W/D)

The IIoT competence center of fortiss focuses on the development of computational and networking architectures for advanced IoT applications and use-cases in sectors such as Mobility, Smart Cities, Manufacturing, etc. Areas of interest include, but are not limited to: Edge computing, in particular decentralised edge architectures; deterministic wireless networking (e.g., Wi-Fi 6, 5G/6G, LoRa/LoRaWAN); dynamic container orchestration; information-centric networking; Integration of ML on the Edge including the "far Edge" (end-user and field-level devices).

To strengthen our team, we are looking for a:

Researcher – Industrial IoT (m/f/d)

The research activities to be developed comprise research and development activities in the context of national and international projects focusing on IoT/Edge/network-compute; advanced training (e.g., support in the organization of international scientific workshops and conferences; development of training activities such as, researchers, students); knowledge and technology transfer (e.g., development of activities such as Webinars to industry). The focus is on the development of software-based solutions aligned with the areas of interest of the team.

Your tasks:

- Conduct pioneering and applied research with focus on computational and networking architectures for advanced IoT applications, in areas such as Edge computing; deterministic wireless and cellular networks; Edge-Cloud continuum orchestration; information-centric networking; Edge AI; 5G, SDN.
- Support ongoing national and international research project development, including software development, scientific dissemination, technology transfer.
- Participate in the supervision of students.
- Support the development of advanced training activities, e.g., Webinars, seminars, scientific workshops, scientific conferences, summer schools.
- Contribute to the overall IIoT strategy, and to the fortiss strategy.
Our offer:

- Compensation according to the regulations of the collective wage agreement of the public service of the German states (TV-L 13)
- Our culture is characterized by an international, diverse and multi-cultural environment promoting an intensive exchange of knowledge across different fortiss departments, and towards international partners.
- Close cooperation and interaction with industrial and academic leaders in the IoT and AI international domain.
- Possibility to collaborate in research and higher education through closely located universities and research institutes.
- Homeoffice (1–2 days)
- Subsidies for transportation (MVV), sports, company pension scheme
- 30 days of holidays.
- Opportunities for personal and professional development, such as coaching, individual training, further education opportunities.

Your profile:

- PhD in computer science, preferably specialization in computer architectures and networking (1-3 years of independent career).
- Good background on wireless/cellular networks. LTE but also: Wi-Fi6/7; LoRa/LoRaWAN etc.
- Good background on IoT overall (Edge/Fog networking architectures; semantic technologies, e.g., WoT; IoT communication protocols, e.g., OPC UA, MQTT, DDS, etc)
- Preferential background on ML engineering (e.g., TinyML, federated learning) within IoT environments.
- Very good publication record in top (IEEE, ACM) academic conferences and journals, area of networking architectures and protocols/IoT.
- Excellent analytical, technical, problem-solving skills.
- Ability to work both autonomously and within a research team involving different levels of researchers (senior, junior, and students).
- Excellent communication skills in English, basic German skills is a plus.
• Preferential background on ML engineering (e.g., TinyML, federated learning) within IoT environments.

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• Excellent analytical, technical, problem-solving skills.

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• Excellent communication skills in English, basic German skills is a plus.

who are we?

fortiss is the state research institute of the Free State of Bavaria for the development of software-intensive systems, based in Munich. The scientists at the institute work in research, development and transfer projects with universities, research institutions and technology leaders in Bavaria, Germany, and Europe. They research and develop methods, techniques, and tools for reliable, secure and comprehensible software solutions and artificial intelligence applications. fortiss is organised in the legal form of a non-profit limited liability company. The shareholders are the Free State of Bavaria (majority shareholder) and the Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V. (Fraunhofer Society for the Promotion of Applied Research).

Did we catch your interest?

Please submit your application with a motivational statement, a detailed CV, a current transcript of records, and a list of references that can be contacted (minimum 2 direct references). References to be contacted are a must. https://recruitment.fortiss.org/

Job-ID: IloT-MA-01-2023

Contact: Prof. Dr. Rute C. Sofia