

Intern (f/m) - Runtime Analysis of Embedded Multicore Systems

Job ID: 137762

Ort: München

Organisation: Corporate Units

Art der Anstellung: Befristet



For our **Corporate Technology in München** we are looking for an **Intern (f/m) - Runtime Analysis of Embedded Multicore Systems** at the earliest opportunity.

Effectively harnessing the many-fold parallelism available on modern parallel hardware architectures becomes increasingly challenging. In particular, meeting performance expectations for programs running on today's complex hardware can require significant effort. As runtime analysis techniques pinpoint to inefficiencies in work distribution, communication, and synchronization, these techniques can be used to monitor the runtime behavior or to identify computational hotspots, simultaneously enabling runtime optimizations and an evaluation of the effectiveness and efficiency of a given implementation. However, state-of-the-art analysis tools are mostly designed for cluster and server applications and therefore not suitable in embedded scenarios, exhibiting non-standard requirements and environments.

In this internship, an infrastructure for the performance measurement and analysis of embedded multi-core applications should be investigated. More precisely, the following tasks can be covered.

What are my responsibilities?

- Familiarization with embedded systems
- Identification and evaluation of the requirements
- Design and prototypical implementation
- Documentation

What do I need to qualify for this job?

- Studies in electrical engineering, computer science, or a related discipline
- Experience in the design and implementation of software systems with C/C++
- Fluency in German and English is a must (both spoken and written)
- Excellent written and oral communication skills
- High motivation and the ability to work effectively with others

You need to absolve an internship, as a compulsory part of the studies.

What else do I need to know?

With over 1,900 research operatives worldwide, the **Corporate Technology** (CT) department occupies a special position within Siemens' R&D facilities. It functions as an international network of expertise and as a global partner for technology and innovations. Through its R&D

activities in Germany, the USA, China, India, Russia, Japan and Eastern Europe Corporate Technology helps secure the company's technological future and bolster its competitiveness.

Research & Technology Center (RTC) is at the heart of Siemens R&D. Its strong technology base makes it a strong in-house partner for innovation. We develop technologies with wide applicability for the Siemens Divisions and help them to successfully bring innovations to market. Our about 1,800 scientists at locations in North America, Europe, and Asia ensure the technological and innovative future of the company.

The **IT Platform** (ITP) Technology Field develops and refines computing platforms to enable new software applications for a wide range of Siemens businesses. These system architectures allow our customers to reap performance benefits from parallel and multi-core architectures and to efficiently handle big data and cloud computing systems. Our experts are located in Germany, the US, India, China and Russia.

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We are looking forward to receiving your online application.

http://www.staufenbiel.de/jobs-arbeitgeber/siemens-ag/jobs/15332?utm_source=Indeed&utm_medium=organic&utm_campaign=Indeed

Please complete all areas of the application form.

Contact

If you have further questions regarding this job offer, please contact **Fabian Bruske** - telephone **+49 30 386-55065**.