

CAN I COMBINE SCIENCE AND BUSINESS IN A SINGLE JOB?

YES.

We'll show you how at Fraunhofer IIS.

Software Developer - Audio Production Tools

The Fraunhofer-Gesellschaft (www.fraunhofer.com) currently operates 76 institutes and research institutions throughout Germany and is the world's leading applied research organization. Around 30 000 employees work with an annual research budget of 2.9 billion euros.

We bring chip design back to Europe!

For a technologically more independent Europe, we aim to develop Fraunhofer IIS into a European IC Design Center for trusted and energy-efficient high-speed ICs by 2025. As a leading competence center for digital chip design, we deliver essential cutting-edge technologies in the areas of exascale high-performance computing and trusted electronics. In addition, we offer sophisticated digital design services based on RISC-V. Our target customers are design houses, semiconductor manufacturers, SMEs, and system integrators. Potential applications are areas such as high-speed data processing, blockchain or cybersecurity. Today, our »Integrated Digital Systems« business unit develops digital circuits in CMOS technologies as System on Chip, ASIC or IP.

What you will do

As a hardware developer, you will specify, design and verify hardware components of complex ASICs and SoCs with embedded microprocessors (RISC-V) in System-Verilog. You will also work with constrained random coverage-driven testbenches using the UVM Framework. In detail, this means:

- By performing feature extraction from register-transfer level (RTL) specifications, you will produce verification plans that are supported by metrics obtained from simulation.
- You will also generate, maintain, and expand test benches based on the UVM framework.
- Using your profound knowledge, you will also contribute to tasks like test development and debugging.
- When working with a device under test (DUT), you will develop precise coverage models.
- By writing SVA assertions and scoreboard checkers, you will ensure the correct operation of the DUT.
- Last but not least, you will prepare, execute and analyze regression runs.

What you bring to the table

- University degree in (electrical) engineering, IT/computer science, hardware development, industrial design or another related field
- Fundamental understanding of digital electronics principles and ability to understand HDL models of digital circuits
- Work experience with UVM test benches
- Proficient with the SystemVerilog language; experience working with at least one other object-oriented languages such as Python
- Very good English and good German language skills, independence, and commitment

What you can expect

Fraunhofer is not only the largest organization for applied research in Europe, but also a top-rated employer. [How so?](#)

- **Our institute culture:** We want our colleagues to feel comfortable. Therefore, we constantly strive to ensure a friendly and supportive working atmosphere within our international team.
- **Exciting activities:** With customers and partners across the globe, we provide an attractive working environment in a highly innovative key industry with exciting ventures and new experiences.
- **Room for creativity:** We want to give our colleagues a generous amount of creative freedom, so that they can contribute and develop their own ideas.
- **Personal development:** With top-of-the-range company equipment and regular training, we aim to provide the best possible working conditions and development opportunities for our colleagues.
- **Flexible working hours:** Due to our wide range of offers, we make it easy for our colleagues to find a comfortable balance between their private and professional lives.

The position is initially limited to 2 years with the aim to extend it subsequently. The weekly working time is 39 hours. The position can also be filled on a **part-time** basis with a preference, however, to have it filled as close to a full-time position as possible. We value and promote the diversity of our employees' skills and therefore welcome all applications - regardless of age, gender, nationality, ethnic and social origin, religion, ideology, disability, sexual orientation and identity. Appointment, remuneration and social security benefits based on the public-sector collective wage agreement (TVöD).

With its focus on developing key technologies that are vital for the future and enabling the commercial utilization of this work by business and industry, Fraunhofer plays a central role in the innovation process. As a pioneer and catalyst for groundbreaking developments and scientific excellence, Fraunhofer helps shape society now and in the future.

Interested?

Apply online now (Motivation letter, curriculum vitae and university and/or work references). We look forward to getting to know you!

Questions about this position will be answered by Meike Hillenbrand.

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Fraunhofer Institute for Integrated Circuits IIS

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Requisition Number: 63924

Application Deadline

