



Open Source Chip Design Verification Tooling (PhD Position)

Hochschule München is among the largest German universities of applied sciences, located at the heart of Munich, Germany. The working group "AEMY" focuses on safe, secure and smart systems. Our main working areas include RISC-V processor design, WebAssembly runtime development and open source chip design tools.

For our research projects we are looking for a qualified and motivated new team member. This position focuses on the interoperability of open source chip design tools. Such Electronic Design Automation (EDA) tools are required to design and validate semiconductor chips and there is an increasing ecosystem of open source tools. To improve the support and adoption of dynamic verification and formal verification using "linear temporal logic (LTL)", novel methods and extensions to the CIRCT chip design compiler framework (based on LLVM) are explored. The goal is support for LTL throughout the open source chip design tools Verilator, Yosys and CIRCT. You will be closely working together with these project communities.

Your profile should cover:

- Enthusiasm for open source development and collaboration
- Basic understanding of compilers and tooling
- Basic understanding of digital design
- Ideally: Understanding of verification

Join us now:

- to become a member of a great team in Munich, Germany
- to work closely with an international open source community
- to pursue a PhD degree at a small and focused research group
- to be actively involved with relevant industry partners in the area

If you are interested, please get in touch: stefan.wallentowitz@hm.edu