PDK Integration & Model Validation Engineer (all gender)

Munich

Reference Number: REF21578D

#weareALTEN - the home of forward thinkers

We are the designers of today for the world of tomorrow.

As one of the world's leading engineering service providers, we at ALTEN are committed to positively shaping the future of our partners, the careers of our employees and the challenges facing our society and environment.

Nearly 60,000 employees in 30 countries are already working on innovative solutions in various engineering and IT sectors such as aerospace, renewable energy, medical technology, railway technology and automotive.

Make it happen

YOU...

- support the validation, qualification, and integration of compact semiconductor models into production Process Design Kits (PDKs)
- perform systematic quality assurance and qualification of compact models prior to production release
- validate electrical model behavior across process corners, voltage ranges, temperature conditions, device geometries, and operating regions
- develop and maintain regression test suites covering DC, AC, transient, noise, and other relevant simulation analyses
- identify model discontinuities, convergence issues, numerical instabilities, and non-physical behavior, and support their resolution
- develop and maintain simulation test benches using Cadence Spectre and Titan
- translate and adapt compact models between supported simulator formats and modeling languages
- integrate qualified models into PDKs and associated design-system infrastructures
- develop and improve automated workflows for model qualification, translation, integration, release management, and regression testing
- implement and maintain scripting solutions primarily using Python, as well as Bash, TCL, or other relevant scripting languages

- collaborate closely with modeling, design, and CAD teams to ensure robust and efficient model delivery processes.

Be our forward thinker

YOU...

- have successfully completed studies in Electrical Engineering, Microelectronics, Physics, Computer Science or a comparable field
- have professional experience in semiconductor model validation, compact modeling, PDK development, or a related area
- possess a solid understanding of compact semiconductor models and model verification methodologies
- have hands-on experience with electrical simulations including DC, AC, transient, and noise analyses
- work confidently with EDA tools, particularly Cadence Spectre; experience with Titan is considered a plus
- have programming experience in Python for automation, workflow development, and validation activities
- are familiar with scripting languages such as Bash and TCL
- have experience developing and maintaining regression testing environments and automated qualification workflows
- understand model qualification, release processes, and Process Design Kit (PDK) integration flows
- work confidently in Linux-based development environments
- possess strong analytical and problem-solving skills with attention to detail
- communicate fluently in English; German skills are considered a plus

We value diversity and therefore welcome all applications regardless of gender, nationality, ethnic and social origin, religion/belief, disability, age and sexual orientation and identity.

Severely disabled persons will be given preferential consideration if they are equally qualified.

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Your contact person

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