



IMMS



Student in Electrical Engineering/Information Technology?

Find topics for internships/BSc/MSc theses: www.imms.de/students



A SELECTION OF OUR CURRENT LIST OF TOPICS:

Measurement and characterization of image sensor chips for bioanalytical applications

Task: Test / characterization of electronic systems

Development of an antenna adaptive impedance matching circuit for RFID application

Task: Hardware design of integrated circuits

Implementation of a Latch-based PullUp-Emulator Circuit

Hardware design of integrated circuits | Simulation

Implementation of Mixed-Signal Ultra-Low-Power Timer Circuits

Task: Hardware design of integrated circuits | Simulation

Evaluation of Algorithms for Runtime Power Modeling of Digital Circuits

Task: Simulation | AI implementation | Software development

Design of a sigma-delta ADC in a 180nm technology

Task: Simulation | Hardware design of integrated circuits

All-Digital Observer Circuits

Hardware design of integrated circuits | Hardware design of printed circuit boards

Simulation-Assisted State Re-Coding for Power Reduction of Digital Circuits

Simulation | Software development | Hardware design of integrated circuits

Machine learning based prediction of critical paths in digital circuits

Task: AI implementation

Layout generation for DRC and LVS Tests

Software development

During your studies, you can contribute to our ongoing research projects. Join us in pushing the limits of what is technically feasible and be part of breaking new ground together. We offer a variety of challenging and practice-oriented topics for mandatory internships, Bachelor's or Master's theses in microelectronics, mechatronics or system design. You will analyse important scientific preliminary questions and support the project teams with development activities.

YOUR BENEFITS WITH US

- Get practical training and use it as study credit.
- Receive best and individual support.
- Get theoretic in-depth knowledge of methods for the practical implementation of your solution.
- Work on challenging research subjects.
- Use our extensive technical equipment that meets industrial standards.

WE HELP YOU TRAIN YOUR SKILLS IN

- Design of ICs and PCBs
- Test and characterisation of electronic systems
- μ C and FPGA programming
- Software development
- AI implementation
- Circuits and systems simulation

All topics: www.imms.de/students

You can flexibly integrate start and duration of each topic into different periods of study. Many of them can be arranged as mandatory internships, BSc or MSc theses.