



Master Thesis: System Modelling for Automotive Power Distribution Topologies

Job description

We are looking for motivated and committed students (f/m/div)* who are willing to learn new things and work in an innovative company acting on a global scale. At KAI GmbH, you will perform your thesis project in an industrial research environment, guided and supported by experienced researchers in such diverse areas as hard- and software design, simulation, modelling and semiconductor technology. We work in close cooperation with universities and research facilities supporting your academic education, whereas our industrial partner Infineon offers interesting opportunities for a prospective career path in the semiconductor industry.

In your new role, you are part of the international automotive engineering team at our site in Villach.

In this position you will:

- Create **system models** based on the current state of the art of an **automotive power distribution architecture**
- Generate **new device models** of **advanced automotive power switches**
- Customize and validate **existing device models** based on **real measurement data**
- Learn about **types** and **characteristics** of **advanced power semiconductors**, especially **Infineon products and technologies**

Further information

Type of employment: Temporary / Full-time (Flexible working hours from Monday to Friday between 6 a.m. and 7 p.m.)

Duration: min. 8 months

This thesis has to be written in cooperation with an university.

Profile

As a true team player, you treat your colleagues with respect and trust. You can convince with a structured and precise way of working. You are a **good networker** and have strong **communication** and **analytical skills**.

You are best equipped for this task, if you have:

- A bachelor degree and most of your master courses finished in **Electrical Engineering** (or similar degree)

At a glance

Location: **Villach (Austria)**
Job ID: **358689**
Start date: **Sep 01, 2022**
Entry level: **0-1 year**
Type: **Full time**
Contract: **Temporary**

Apply to this position online by following the URL and entering the Job ID in our job search:

Job ID: **358689**
www.infineon.com/jobs

Contact

Lisa Derhaschnig
Student Attraction Manager



- Basic knowledge in **automotive** and **semiconductor applications**
- Basic knowledge in the field of **compact modelling** and **simulation**
- Basic knowledge of **SPICE simulation software** and **Simscape**
- Interest for **application-based simulation** in the field of **power electronics**
- Solid **English** language skills, German language skills would be a plus

This position is subject to the collective agreement for workers and employees in the electrical and electronics industry (full-time), employment group D for master students (<https://www.feei.at/wp-content/uploads/2022/05/minimum-salaries-white-collar-workers-2022.pdf>).

Please attach the following documents (German or English) to your application:

- Motivation letter
- CV
- Certificate of matriculation at a university
- Transcript of records
- Highest completed educational certificate (Matura certificate for Bachelor students, Bachelor certificate for Master students)
- Reference letter (optional)

Benefits

- **Villach:** Coaching, mentoring networking possibilities; Wide range of training offers & planning of career development; International assignments; Different career paths: Project Management, Technical Ladder, Management & Individual Contributor; Flexible working conditions; Home office options; Part-time work possible (also during parental leave); Sabbatical; Child care in Villach & Klagenfurt; On-site social counselling and works doctor; Health promotion programs; On-site canteen; Private insurance offers; Wage payment in case of sick leave; Corporate pension benefits; Flexible transition into retirement; Performance bonus; Accessibility, access for wheelchairs

Why Us

Part of your life. Part of tomorrow.

Infineon is a world leader in semiconductor solutions that make life easier, safer, and greener. Our solutions for efficient energy management, smart mobility, and secure, seamless communications link the real and the digital world.

** The term gender in the sense of the General Equal Treatment Act (GETA) or other national legislation refers to the biological assignment to a gender group. At Infineon we are proud to embrace (gender) diversity, including female, male and diverse.*

Infineon Hub - Connect. Create. Challenge.

The iHub at TU Wien represents an inspiring tech platform, networking area and event location, connecting Infineon Austria with tech experts, science specialists and young professionals.

Check out our upcoming events:

[Infineon iHub](#)

