

## Working Student Power Electronics (m/f/d)

Location: Erlangen, Germany

For this position we are not offering a full-time internship, but an intermediate-term activity as a working student on a regular basis.

### ABOUT FLUENCE

Fluence, a Siemens and AES company, is the global market leader in energy storage technology solutions and services, combining the agility of a technology company with the expertise, vision, and financial backing of two well-established and respected industry giants. Building on the pioneering work of AES Energy Storage and Siemens energy storage, our goal is to create a more sustainable future by transforming the way we power our world. Providing design, delivery, and integration, Fluence offers proven energy storage technology solutions that address the diverse needs and challenges of customers in a rapidly transforming energy landscape.

Fluence currently has more than 2.4 gigawatts of projects in operation or awarded across 24 countries and territories worldwide. In 2021 we topped the Guidehouse utility-scale energy storage leaderboard and were also named one of Fast Company's Most Innovative Companies. In 2020, our sixth-generation Tech Stack won Commercial Technology of the Year at the 22<sup>nd</sup> annual S&P Global Platts Global Energy Awards.

### Leading

Do others come to you for your subject matter expertise? Are you excited by the challenge of working in a start-up atmosphere with a purpose?

You will be part of the Inverter Center of Excellence (CoE) Team based in Germany and in the U.S. Minimum duration of this internship is 6 months and can be extended up to one year.

### Responsible

Fluence is defined by its unwavering commitment to safety, quality, and integrity. We take personal ownership in what we do, developing trust in our relationships with internal and external stakeholders. We firmly believe in having honest, forthcoming, and fair communications. You will be responsible for:

- Support in theoretical analysis of power converter hardware and controls with analytical calculation and simulation aimed for performance evaluation, component benchmarking, quality and safety assessments.
- Support in modelling and simulation of power electronic converter topologies for battery energy storage systems (BESS) under different operating conditions including contingencies.
- Support in evaluation and benchmarking of novel BESS control concepts using Fluence proprietary power plant controller interacting with converter dynamics.
- Literature survey and management of technical documents. Documentation of development activities in form of technical report and oral presentation.
- Further supporting activities related to evaluation and documentation of various technical aspects of power converters and controls for ongoing development.

## Agile

Here at Fluence, we strive to continuously improve, be intellectually curious and be adaptive to our customers and employee's needs. Collaboration is key, both in our partnerships with our customers, and with each other. Fluence prioritizes the most critical efforts that allow for the greatest impact.

## Essential Qualifications:

- Registered in a reputed European University to undertake Master of Science (MSc) or equivalent degree program in Power Electronics, Power Engineering or similar relevant Electrical & Electronics field
- Good understanding of power electronic converter hardware and controls
- Can do attitude, eager to learn new things and ready to think outside the box
- Passed examination for one of related lectures, e.g. Power Electronics, Semiconductor device, Electrical Drives, etc., are a must (good grades preferred)

## Preferred Qualifications:

- Good understanding of Battery Energy Storage Systems and Distributed Energy Systems
- Experience in one or some of these CAD tools:
  - Circuit simulation Matlab & Simulink, PLECS, Simetrix, etc.
  - Programming language C, C++, Python

## Fun

Working on transforming a fundamental part of our society is exciting and fulfilling. It requires creativity, diversity of ideas and backgrounds, and building trust to effect change and move with speed. We respect our coworkers and customers. We listen to what others have to say, and we are inclusive.

Join our creative and motivated global group in our quest to develop the future of energy grids helping cleaner energy sources to establish with our battery energy storage systems.

## GET IN TOUCH

Please send your resume and cover letter to [careersgermany@fluenceenergy.com](mailto:careersgermany@fluenceenergy.com).

Fluence IS AN EQUAL OPPORTUNITY EMPLOYER and fully subscribes to the principles of Equal Employment Opportunity to ensure that all applicants and employees are considered for hire, promotion, and job status without regard to race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, marital or familial status.