

# Internship - Parameter Optimization in Structural Mount System Simulations Original Equipment Solutions (m/w/d) - REF91084C

## Ihre Aufgaben

We are looking for a motivated and independent master's student with a strong background in parameter optimization, programming, and basic knowledge of structural simulations, to join our team. This Master Thesis opportunity focuses on the optimization of mount system simulation procedures, offering hands-on experience in algorithm design, code development, and performance enhancement for engineering systems.

The candidate will be responsible for analyzing and refactoring an existing calculation code for mount system simulation, with the goal of integrating advanced optimization functions. This includes evaluating the current implementation, identifying areas for improvement, and rebuilding the codebase using appropriate platforms and programming languages. The role also involves literature research and collaboration with engineering teams to define optimization strategies for both single and multi-system scenarios.

## Key Responsibilities

- Gain practical understanding of the current process of designing and optimizing mount systems.
- Code Refactoring: Analyze the existing mount system simulation code and refactor it to improve performance, maintainability, and extensibility.
- Platform Evaluation: Assess and recommend suitable platforms and programming languages (e.g., MATLAB, Python) for the refactored solution.
- Optimization Function Design: Define and implement detailed optimization functions for single and multi-system scenarios in collaboration with engineering teams.
- Literature Research: Conduct comprehensive literature reviews to support the development of simulation and optimization strategies.
- Documentation: Maintain thorough documentation of code changes, optimization processes, and research findings.
- Independent Work: Manage tasks autonomously while maintaining alignment with project goals and timelines.

## Ihr Profil

### Qualifications:

- Currently pursuing a degree in Data Science, Mechanical Engineering, Computer Science, Applied Mathematics, or a related field.
- Working knowledge of MATLAB and Python.
- Experience with Design of Experiments (DOE) and optimization algorithms.
- Demonstrated ability to work in an agile manner and manage



Job ID  
**REF91084C**

Arbeitsbereich  
**Forschung und Entwicklung**

Standort  
**Hann. Münden**

Ansprechpartner  
**Anna Lücke**

Rechtliche Einheit  
**ContiTech MGW GmbH**

complex tasks.

- Excellent documentation and communication abilities.
- Ability to work independently (and as part of a team when required).
- Strong analytical skills and attention to detail.
- Familiarity with simulation software (Abaqus) and methodologies is a plus.

Please remember to upload your current certificate of enrollment, your latest transcript of records, and, if applicable, an excerpt from the current study regulations regarding the completion of a mandatory internship, as these documents are essential for processing your application.

Applications from persons with severe disabilities are welcome.

## Unser Angebot

What We Offer:

- Mentorship from experienced professionals in the field.
- Opportunity to contribute to impactful projects within the automotive industry.
- Collaborative and innovative work environment.
- Competitive stipend and potential for future opportunities.

Ready to drive with Continental? Take the first step and fill in the online application.

## Über uns

Original Equipment Solutions (OESL) is emerging as a stand-alone global leader in the automotive sector, with over 17,000 employees and €2 billion in annual sales. Operating in 15 countries across 35 locations, including technology centers, OESL will build on Continental's rich legacy to deliver high-quality parts to major OEMs and commercial vehicle customers worldwide.

## Why Join OESL ?

- **Greater Impact:** Take part in shaping the future of a dynamic organization, with the opportunity to bring ideas to life and reap significant professional rewards.
- **Growth and Innovation:** Work in a fast-moving, environment that encourages innovation and offers opportunities for continuous growth and expanding your skill set.
- **Creative Space:** Experience the entrepreneurial spirit of a start-up culture within a global organization, enjoying both the creative freedom and the responsibility needed to thrive in modern working environments.
- **Tight-Knit Team:** Join a highly collaborative team where individuals have the power to shape their work, make meaningful contributions, and drive collective success.