



Welcome to your future!

Join a team that values creativity, forward thinking and problem-solving. Our team works with DLR (German Aerospace Agency, SpaceX and leading European companies in the IoT domain). We encourage fresh perspectives and embrace diversity of thought. Your chance is to play a part in impactful work, make a difference in the world with projects that challenge and inspire. From cutting-edge technology to groundbreaking research, your contributions will shape the future.

Explore your opportunities by simply reaching out to us.

We are looking for

Master Master Students/Junior Researchers
Computer and AI Scientists or similar (f/m/x)
Electrical and/or mechanical engineers (f/m/x)

To work and develop their **master thesis** in the topic:

Machine learning-based predictive maintenance for satellite communication systems: development of predictive maintenance models using machine learning algorithms to improve the reliability and performance of satellite communication systems through proactive fault detection and mitigation.

Includes the following tasks:

Investigation of communication architectures and protocols optimized for space-based IoT applications, including sensor networks, remote monitoring and environmental sensing using nano-satellite constellations from Starlink®.

What we expect from you:

- Master's student in computer science, computer engineering, electrical engineering, artificial intelligence or a related field
- Strong interest in embedded systems, automatised sensor networks, computer networks
- Ability to communicate and write in English



What would be a great plus:

- Experience with nano-satellite communication, IoT protocols, sensors and microprocessors
- Experience with CAD tools is optional

What we offer?

- 3-4 places per year
- Mentoring support - however, independent work is required
- Hybrid work - Infrastructure currently available at two locations: Mülheim an der Ruhr and Düsseldorf (Factory Campus)
- Measuring equipment, excellent IoT connections and equipment, own team server for collaboration, desks available, workbenches available, conference area, calm area for virtual meetings, also soldering equipment available and IT equipment.
- Participation in national and international meetings
- Bring your own device (Tablet, Laptop, Macbook)

Further information:

Starting date: 3rd quarter of 2024!

Applications: March/November

Any questions: support@greatech.de

Duration of contract: up to 6 months

Type of employment: Student research project

Send us here support@greatech.de your complete application: motivation letter, CV, certificates and references

Include **#universeh** in your application, if apply!*

*for students from the UNIVERSEH alliance partner universities (University Fédérale de Toulouse (France), the University of Luxembourg (Luxembourg), Heinrich-Heine-Universität Düsseldorf (Germany), Luleå tekniska universitet (Sweden), Akademia Górniczo-Hutnicza im. Stanisława Staszica w Krakowie (Poland), University of Namur (Belgium) and Tor Vergata University of Rome (Italy).

Contact:

Christoph Grundig (Co-founder, Product Owner, Int. Business Dev.)

Adam Copp (Dipl.-Ing., Head of Development, Quality Assurance)

Apply now!

apply@greatech.de

<https://www.greatech.de/career-application>