



Robot Software Engineer (f/m/d)

Permanent employee, Full-time in Osnabrück, Germany

About Nature Robots

Nature Robots is a disruptive robotics and AI startup dedicated to transforming agriculture through innovation. We are committed to developing cutting-edge solutions that support regenerative and sustainable farming practices, addressing the challenges posed by climate change, population growth, and the need for local food production.

The Opportunity

As a **Robot Software Engineer**, you will be instrumental in developing autonomous navigation and precision farming software. Your work will directly contribute to our full-stack, modular autonomy platform for complex agricultural environments. Join us in creating technology that empowers farmers and enhances sustainable food production.

Your Role

- Develop and optimize **robot planning, control, and navigation software**.
- Implement and improve **Our Simultaneous Localization and Mapping approach** and **3D LiDAR-based obstacle avoidance**.
- Integrate **sensor data** (LiDAR, cameras, IMU, etc.) for real-time robot decision-making.
- Enhance **autonomous global path planning** in **dynamic agricultural environments**.
- Work with embedded systems and robotics middleware such as **ROS 2**.
- Conduct **field tests** to validate algorithms and improve real-world performance.
- Further development integration of a robot navigation system to autonomous agricultural robots using **ROS 2, and Move Base Flex (MBF)**
- Further development of row following and head land controllers for various environments as MBF controllers and integration in the corresponding BT.




- Implementation, integration, testing and documentation of the developed strategies into the existing solutions.

What you bring

- Master's degree in computer science, robotics, engineering or a related field.
- Professional experience related to the development of an end-user product
- **Strong skills in C++, Python, and ROS 2**
- Experience with **SLAM, motion planning, and perception**.
- Hands-on experience with **3D LiDAR, depth cameras, and sensor fusion**.
- Strong understanding of **control algorithms and real-time computing**.
- Experience in agricultural robotics is a plus but not required.
- Passion for **sustainable agriculture and autonomous systems**.

Our offer

- A meaningful role in a pioneering software & agri-tech startup making a real-world impact with real products.
- We offer challenges every day and organic growth opportunities as the company scales.
- Corporate benefits, such as Gym memberships, etc. (HanseFit).
- 30 vacation days, flexible hours and hybrid solutions.
- Work in an agile and iconic environment, the Coppenrath Innovation Centre (CIC - www.cic-os.de) close to Osnabrück Main Station and at our external test facility in the nature with a workshop, an office and a fenced agricultural test environment close to Bohmte (www.arenshorst.com).

 **Interested?** Send us your motivational letter, CV and portfolio at career@naturerobots.com 