

Job Offer - Automation & Mechatronics - Software Engineer

Full-time | Dresden/Munich | Hybrid/On-site | Includes VSOP

HyJOIN is a breakthrough joining technology with the potential to transform manufacturing, design, and sustainability standards. As Software Engineer, you will be at the heart of turning our technology into real-world solutions — managing tests, supporting customers, leading machine development, and contributing to our growth as an early founding team member.

Your Mission

You will lead the hands-on development, validation, and optimization of hyJOIN machines — working across lab operations, customer consulting, product adaptation, simulations, Programming, project coordination, and business development. Your role bridges digital and hardware, ensuring our technology is robust, scalable, and industry ready.

What You Will Own

- Develop control software for machine subsystems (motion, sensors, lasers, thermal modules, pneumatics, vision)
- Program PLCs, embedded systems, and industrial PCs for real-time and event-driven control
- Integrate hardware components (laser sources, actuators, sensors, vision systems) with control software
- Configure HMIs for machine operation and diagnostics
- Implement cloud-based tools for remote monitoring, predictive maintenance, and quality control
- Apply AI-based process optimization and closed-loop control (e.g., PID)
- Collaborate on control architecture, safety logic, and standards-compliant systems (ISO 13849, IEC 61508)
- Support machine commissioning, debugging, and remote service

What We're Looking For

- Degree in Mechatronics, Automation, Electrical Engineering, or related field
- 5+ years experience in automation/control software for machinery or manufacturing systems
- Strong skills in:
 - PLC programming (e.g., Siemens TIA Portal, Beckhoff TwinCAT, Codesys)
 - Motion control, servo drives, industrial communication (EtherCAT, Profinet, OPC UA)
 - Programming (Structured Text, Ladder Logic, C/C++, Python)
 - HMI/SCADA systems and real-time operating systems (RTOS)
 - Laser systems, thermal control, and machine safety standards
 - Vision systems and image processing (OpenCV, Cognex)
- Hands-on experience with machine commissioning and cross-functional R&D collaboration

What We Offer

- An engineering role in a high-potential industrial deep tech company.
- VSOP participation aligned with your impact and contribution.
- Direct collaboration with R&D partners, and global customers.
- Full ownership over projects with tangible real-world impact.
- Hybrid work model with access to a fully equipped Tech Lab.
- A team that values initiative, curiosity, and execution.