

SOFTWARE ENGINEER – MEDIOR (PLC, HMI & SCANNER CONTROL)

At inPhocal, we're pushing the limits of industrial laser marking. Our patented optical technology achieves an ultra-long focus depth, enabling high-speed marking on flat and curved surfaces without refocusing — something no other system in the world can do. Our machines are already in the field, and we're scaling up fast.

To support our growth, we're looking for a Medior Embedded Software Engineer who will take ownership of the embedded control software developed for us by an external partner — and help drive it forward.

HOW YOU'LL MAKE AN IMPACT

You will be the expert on our control software, which powers the PLCs, HMIs, and scanner cards in our laser marking systems. This role is a unique blend of hands-on technical work and strategic collaboration. Your responsibilities will include:

- **Technical Ownership:** Serve as the internal **technical owner of the PLC, HMI, and scanner card software**, requiring a deep understanding of the entire software architecture.
- **Partner Collaboration:** Work closely with our external software development partner to guide their work, participate in design discussions, review code, and provide feedback to improve software functionality.
- **Software Development & Integration:** Lead the **end-to-end development of PLC logic** (IEC 61131-3, primarily Structured Text) and building intuitive HMI designs within the Beckhoff (TwinCAT) ecosystem, while integrating scanner card software for real-time positioning and laser firing.
- **Cross-Functional Coordination:** Act as the bridge between our mechanical, optical, and production teams to ensure the software meets all functional requirements, performance targets, and safety standards.
- **Process & Lifecycle Management:** Establish and enforce best practices for the full software lifecycle, building a strong foundation for version control (e.g., Git), code maintainability, and comprehensive technical documentation.
- **Quality & Validation:** Drive continuous improvement, building greater software robustness and quality by developing and implementing a comprehensive testing strategy (unit, integration, and system testing). You will also support on-site commissioning, troubleshooting, and customer visits, including internationally.

WHAT YOU'LL BRING

- A Bachelor's or Master's degree in a relevant engineering or computer science field.
- 3-5 years of experience in software development for industrial machinery or automation.
- Strong skills in **PLC programming** (Structured Text, Ladder Logic, or FBD).

- Proven experience in architecting, implementing, and managing solutions that bridge embedded systems and PLC-based control environments
- Proficient in English (spoken and written).
- Experience with HMI development, industrial protocols (EtherCAT, Profinet) , or scanner card programming for laser systems.

WHAT WE OFFER

- **The Opportunity to Make an Impact:** Take a central, influential role in shaping the control software for our world-first laser technology.
- **A Supportive & Flexible Culture:** Join a fast-moving, supportive environment where your expertise is trusted. We foster a fun, energetic atmosphere and provide flexibility, including flexible working hours.
- **Growth:** A possible growth path to a broader role with more responsibilities. Continuous learning opportunities, internal training, and personalized coaching to help you excel.
- **Competitive Compensation & Benefits:** You will receive a competitive salary package, including an employee stock option plan and a pension contribution paid on top of your monthly salary

Ready to make your mark?

Please send an email with your CV to
software@inphocal.odoo.com

Please visit our website, LinkedIn page and watch our CEO's pitch to have more information about the unique inPhocal Laser Technology.



