

Job Description – Principal Software & Automation Engineer

About ELDICO Scientific AG

ELDICO Scientific AG enables pharmaceutical and industrial customers to gain reliable access to structural certainty—supporting confident decisions where conventional analytical methods reach their limits. This is achieved through advanced electron diffraction platforms combined with tightly integrated software, automation, and workflows.

ELDICO operates in highly regulated environments and is transitioning from a research-driven startup toward a product-focused, quality-driven organization, with increasing emphasis on robustness, automation, and scalability.

The Role

We are hiring a Principal Software & Automation Engineer to take technical ownership of the instrument software stack in a regulated, pharma-facing environment.

This role is central to ELDICO's evolution from early product to industrial-grade platform. You will shape software architecture, automation, operator-facing UI behavior, and software-driven system decisions, while integrating external development partners and contributing hands-on.

Scope & Authority

- Technical owner of instrument control, automation, workflow, and operator-facing software
- Software authority in a regulated environment, responsible for robustness, traceability, and quality alignment
- Influence on hardware, electronics, and system-level decisions driven by software requirements
- Primary internal counterpart to external software and hardware development partners
- Hands-on technical leadership within a mixed internal / external team (4–7 contributors initially)
- Close collaboration with C-level leadership to mature technical structure, processes, and culture

Key Responsibilities

- Own and evolve the software stack with a strong focus on reliability, robustness, and compliance readiness
- Drive software-driven hardware and electronics interface decisions
- Design and scale automation workflows supporting higher throughput and reproducibility
- Shape operator-facing UI behavior with emphasis on clarity, usability, and error prevention
- Integrate and progressively internalize work from external development partners
- Mentor engineers across varying seniority levels and support team growth
- Contribute hands-on during periods of high execution demand

Required Experience & Skills

- Senior experience in software development for complex, hardware-integrated systems
- Strong proficiency in Python for production systems (instrument control, automation, workflows)
- Solid understanding of electronics or electrical engineering concepts, or formal EE background
- Experience working in regulated or quality-driven environments (e.g. pharma, medtech, industrial systems)
- Proven ownership of a non-trivial software architecture over time
- Ability and willingness to operate hands-on as a senior technical leader

Nice-to-Have

- C or C++ in hardware-adjacent or performance-critical contexts
- Responsibility for or close collaboration on operator-facing UI systems
- Automation frameworks, CI/CD pipelines, Docker
- Prior exposure to ISO 9001, FDA, or similar quality systems
- Experience helping startups transition into structured, product-oriented organizations

What This Role Is Not

- Not a pure software architect role without hands-on contribution
- Not an academic or exploratory research position
- Not a greenfield rewrite project
- Not a people-manager-only role detached from technical work

How to Apply

Send your CV, cover letter, and contact information to hr@eldico.ch. Please use the subject line *Application – Principal Software & Automation Engineer - <your name>*.