



## Senior Software Engineer / Software Architect – Data Platform

### About SpectaCell

SpectaCell is a TechBio start-up from imec, VIB and Ugent, building a first-of-its-kind digital microscope designed to become the industry standard for functional testing of novel cancer and immune therapies. By combining breakthrough imaging technology with deep AI-driven biological insights, we are bridging the gap between lab research and large-scale biopharma manufacturing. We are on a mission to build a scalable tools-and-data business that empowers researchers and manufacturers to accelerate the development of life-saving therapies through smarter tools and better data.

### The role

We are looking for a hands-on, versatile Senior Software Engineer / Software Architect to join our early team and help build the software and data platform that will underpin our future product. You will work across the full product development cycle: designing and evolving the overall system architecture, building the cloud and data infrastructure that lets us move faster, shaping how models are deployed into production, and helping create intuitive tools that bring imaging intelligence to scientists and future customers. You will work closely with data scientists, product leaders, engineers, external partners, and future users. You will be one of the people who decides what robust, scalable, and usable looks like, how we measure it, and how we get there.

This is a high-ownership role for someone who likes solving hard technical problems in real systems, enjoys working across disciplines in a growing, ambitious team, and wants to help turn cutting-edge imaging and analytics into tools that will accelerate the development of novel drugs.

### What will you do

- Design and evolve the overall system architecture spanning data ingestion, cloud compute, model deployment, storage, APIs, and visualization layers.
- Lead development of scalable and secure cloud solutions that support live imaging workflows, high-volume data processing, and future product deployment.
- Collaborate closely with data scientists to integrate, deploy, and operationalise models in production systems, ensuring they are robust, observable, and usable in real workflows.
- Build and maintain the software and data infrastructure required for reliable processing, orchestration, and delivery of imaging data and analytics.
- Oversee front-end and back-end integration to deliver intuitive, responsive interfaces that work for scientists, technical teams, and future customers with different skill levels.
- Drive engineering excellence through code reviews, sound architectural decisions, documentation, testing practices, and pragmatic process improvements.
- Mentor engineers and contribute to technical strategy, helping establish scalable engineering foundations as the company grows.

- Work effectively in a fast-moving, multidisciplinary start-up environment, taking ownership across a broad range of tasks as needed.

### **What we're looking for**

- Bachelor's or Master's degree in Computer Science, Software Engineering, Data Engineering, or a related field.
- 7+ years of relevant experience in software engineering, including system design, architecture, and delivery of production-grade systems.
- Proven expertise in cloud platforms such as AWS, GCP, or Azure, and in designing scalable, secure, and maintainable distributed systems.
- Strong foundation in modern software engineering practices, including API design, data infrastructure, service integration, and production operations.
- Experience building user-facing software with modern web technologies and data visualisation capabilities is a strong plus.
- Comfort working closely with data scientists to bring analytical models and pipelines into production environments.
- Confidence making architectural trade-offs, setting technical direction, and improving engineering quality in an early-stage setting.
- Leadership experience with multidisciplinary teams, including mentoring and code review, is preferred.
- Interest in imaging, life sciences, or other data-intensive applications is a strong plus.
- A practical, self-directed, low-ego mindset, and excited to take on broad responsibilities within an entrepreneurial environment.

### **Why SpectaCell**

- You will have broad ownership from day one and play a defining role in building one of SpectaCell's first core software and data platform capabilities. You will work across disciplines rather than inside a narrow defined function.
- You will join a young, ambitious start-up at a stage where your work can materially shape the company's trajectory.
- We offer a fast-paced working environment in our Ghent-based hub and a flat reporting structure that puts you at the heart of our mission.
- You will benefit from an attractive salary package with a wide range of benefits, including meal vouchers, group insurance, a mobility budget, flexible working hours, and the opportunity to participate in an employee stock option plan.

**Interested?** Contact us via [info@spectacell.com](mailto:info@spectacell.com)