



Software Engineer – 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 Software Engineer 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: building APIs and services for imaging data, implementing the back-end components that make the platform reliable and scalable, helping shape how models are deployed into production, and contributing to intuitive tools that turn raw data into useful insights for 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 helps decide what robust, usable, and scalable 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

- Build APIs and services for data upload, orchestration, transformation, and visualisation of high-volume imaging data.
- Implement scalable back-end components for real-time image streaming, metadata management, storage, and processing workflows.
- Collaborate closely with data scientists to integrate, deploy, and operationalise AI and image-analysis models in production systems.
- Contribute to user-facing dashboards and tools that support exploratory data analysis, visual feedback, and day-to-day scientific workflows.
- Help define and maintain the software and data infrastructure required for reliable processing, delivery, and observability of imaging data and analytics.
- Design clean interfaces between services, data stores, and front-end components so the platform can evolve as the product matures.
- Write maintainable, well-tested code and contribute to sound engineering practices, documentation, and pragmatic process improvements.

- 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.
- 3+ years of relevant experience in back-end or full-stack software development, ideally in Python, Go, Node.js, or similarly production-oriented environments.
- Strong foundation in modern software engineering practices, including API design, service integration, testing, and production operations.
- Familiarity with RESTful APIs, containerised development, and cloud-based systems using tools such as Docker, Kubernetes, AWS, GCP, or Azure.
- Understanding of data storage and retrieval patterns for large datasets, including relational databases and object storage such as PostgreSQL and S3.
- Comfort working closely with data scientists to bring analytical models and pipelines into production workflows.
- Experience building user-facing software, dashboards, or data visualisation capabilities is a strong plus.
- 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