

Backend Python Engineer

m/f/d, Genf

For our client in **Geneva**, we are looking for a **Backend Python Engineer** to join an international scientific environment and contribute to the development and modernisation of large-scale information platforms. In this role, you will work on backend services, data pipelines and search technologies that support scientific discovery and open access for researchers worldwide.

As part of the Tools and Services team, you will help evolve platforms that manage scientific publications, research data and digital archives. Your focus will be on building scalable backend solutions, improving data processing workflows, enabling AI-driven access to scientific content and ensuring reliable production systems.

Your Task:

- * Design, develop and operate backend services using **Python**
- * Build and maintain scalable data ingestion and processing pipelines for scientific metadata and full-text content
- * Modernise existing ingestion workflows and migrate processes to **Apache Airflow**
- * Design and implement robust **REST APIs** for internal applications, partners and external tools
- * Develop and optimise search capabilities using **OpenSearch**, including indexing strategies and relevance tuning
- * Support the integration of AI-driven retrieval solutions and Model Context Protocol services
- * Improve data quality through enrichment, deduplication and automated processing workflows
- * Contribute to the modernisation of digitisation and archival services
- * Support large-scale data migrations while ensuring metadata consistency and quality
- * Develop containerised applications and support modern deployment processes
- * Implement automated testing, code reviews, monitoring and CI/CD practices

Job profile

 IT - Software Engineering

 Genf

 Contracting

 Full Time



01 November 2026 - 24 months, with a possible extension up to a maximum of 36 months

 Python

Job benefits

 Company laptop

 First-name terms

 Modern workspace



Sounds interesting?

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- * Contribute to open-source software and support the Open Science community

Your Profile:

- * University degree in Computer Science or a related field with relevant professional experience
- * Strong professional experience in backend development with **Python**
- * Hands-on experience with Python frameworks such as **Django, Flask and FastAPI**
- * Solid experience designing and developing **REST APIs**
- * Strong understanding of relational databases such as **PostgreSQL** and document databases
- * Practical experience with search technologies such as **OpenSearch / Elasticsearch**, including indexing and relevance tuning
- * Experience with **Docker, Kubernetes, Git and CI/CD pipelines**
- * Knowledge of asynchronous programming, automated testing and software engineering best practices
- * Experience with large-scale data processing, metadata-driven systems and data pipelines
- * Experience with **Apache Airflow** or similar workflow orchestration tools is an advantage
- * Knowledge of AI-driven retrieval systems and AI/LLM integrations is a plus
- * Familiarity with digital archiving, content management systems or scientific information platforms is an advantage
- * Strong analytical and problem-solving skills with a focus on developing reliable, scalable and maintainable software solutions
- * Proactive, quality-oriented team player with strong ownership and ability to work effectively in multicultural environments
- * Excellent spoken and written English skills

Sounds like a great job?

Then we look forward to receiving your complete application documents through our online application form.

When applying by email, the sender agrees that his or her data will be used in accordance with our data privacy policy.

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