

The FHNW Institute for Data Science is looking for an expert to support the development and deployment of the Square Kilometre Array Regional Network (SRC) infrastructure in Switzerland.

## Swiss SRC Lead Software Architect

### About the role

The Swiss SRC Lead Software Architect is responsible for the implementation and operations of the Swiss SRC software infrastructure. In close collaboration with the Swiss SRC Project Scientist at EPFL, he or she ensures that the infrastructure supports the goal of maximising the scientific return of the Square Kilometer Array Observatory (SKAO) in Switzerland. To achieve this, he or she pays particular attention to the needs of the infrastructure stakeholders, in particular the SKAO and SKACH partners. He or she coordinates and supports the integration of the different software development efforts of the SKAO and its Swiss partners, most likely with a deployment on the systems of the Swiss National Supercomputing Centre (CSCS). The Software Architect ensures that the Swiss SRC inspires other members of the worldwide SRC network and that their successful developments are leveraged.

This person reports to the SRC Project Scientist. He or she communicates regularly with the management of SKA in Switzerland (SKACH), the SRC network and SKAO, as well as with scientists and software developers.

### Responsibilities

- Lead the Swiss SRC software architecture design and implementation efforts. Manage operations, schedules and deliverables.
- Support SRC prototyping efforts within Switzerland
- Be recognised as the primary point of contact for software matters related to the Swiss SRC.
- Provide requirements engineering for the Swiss SRC in terms of science, technology, platforms and operations.
- Align the Swiss SRC with Swiss and international stakeholders in various organisations such as EPFL, CSCS and SKAO.
- Communicate between SKACH members, SKAO and SRCs
- Integrate existing projects of SKACH partners into the Swiss SRC
- Lead a core software team at FHNW
- Ensure availability of technical documentation

## Requirements

- Experience with practical project delivery, working within defined budgets and timelines, communicating with diverse teams, and change management best practices.
- Excellent communication and influencing skills, for different interest groups and stakeholders
- Fluent in English, writing and speaking
- Willing to (re)present activities internally, to SKAO and SRCNet

## Desired Skills and Experience

- Demonstrated programming fluency in Python and C++ with at least a Masters degree in software engineering and/or in data science
- Professional work experience
- Experience with large-scale big data projects, e.g. data center software expert or astronomy software expert, preferably high-throughput HPC data processing pipelines
- Expertise in radio astronomy or related fields
- Experience with science platform development
- Experience with data science tools
- Experience with federated systems
- Expertise in systems engineering

The position is planned as a permanent position with a probation time of 1 year and a decision about permanency after 5 years. To apply, please follow this link. For more information, please contact Prof. André Csillaghy, head of the FHNW Institute for Data Science, [andre.csillaghy@fhnw.ch](mailto:andre.csillaghy@fhnw.ch).