Senior Data Architect ETL - Python

The International Digital Health & AI Research Collaborative (I-DAIR)

Background

The International Digital Health & AI Research Collaborative (I-DAIR) is a Geneva-based non-profit initiative for the inclusive, responsible and innovative use of data and digital technologies for global health. We are currently funded by some of the leading foundations in the area of health and innovation, and our partners are pursuing exciting and cutting-edge work in digital and artificial intelligence (AI) - based applications for health across the globe.

The goal of the initiative is to co-create a neutral trusted platform for enabling global research collaborations on digital health and AI for health, and for convening stakeholders to develop and share global public goods as well as solve problems for the inclusive, equitable and responsible deployment of data and AI for health. We are a small but fast-growing and highly diverse team, currently working in a hybrid format (remotely and at our HQ in Geneva, Switzerland).

A series of pathfinder projects in areas such as a global research map, real time epidemiology and dashboards, data architectures and data interoperability, bridging research and practice communities through micro-narratives, experience sharing and capacity-building, and governance for AI and data for health are currently being developed and implemented. These projects serve as a prelude to further development of the platform, which is currently incubated within the Global Health Centre (GHC) at the Graduate Institute, Geneva, and its formal launch in 2022.

I-DAIR is currently looking for a Senior Data Architect to support the design and development of its digital health and AI solutions. This will be a one-year fixed-term position, with possibility of renewal. The position location is flexible, though preference will be given to candidates located in one of the geographies where I-DAIR is currently developing its hubs (Switzerland, Singapore, Tunisia, Kenya, India, Estonia).

**Note:** I-DAIR is also currently seeking a UX/UI Engineer and an AI/ML Data Scientist. We welcome applications for these three posts from consortiums or from private companies which are able to provide a full range of expertise across these three domain areas.

Job Description

We’re hiring an experienced Data Architect to join our team in order to help lead the build-out of our data integration and pipeline processes and tools. In this role, you will coordinate with a variety of IT partners to elicit and translate high level business requirements into detailed system requirements. You will participate in the entire software development lifecycle by writing and executing test plans, finding solutions to issues during development and after deployment. You
should be intellectually curious, have a solutions-oriented attitude and enjoy learning new tools and techniques.

- Create pipelines to ingest and maintain complex data sets from different stakeholders for use in machine learning models;
- Work with data scientists to create and maintain data ontologies for Digital Health;
- Create the roadmap of how to continually evolve the data engineering infrastructure and techniques;
- Mentor interns and junior data engineers and teach them how to use data engineering techniques to solve real world problems;
- Communicate complex concepts to team members.

**Experience**

- At least 5 years experience designing and building data processing/ETL pipelines;
- At least 5 years experience in Python and Spark or similar technologies: Hive / Kafka / HBase;
- Data engineering experience to build and customize solutions and manage integrations with other systems. This might include designing, developing, testing and deploying custom solutions;
- Experience in designing efficient and robust ETL/ELT workflows, schedulers, and event-based triggers;
- Experience as a Big Data Developer;
- Exposure to Data Mining, Data Engineering and Data Modeling;
- Exposure to Graph Databases.

**Education/Qualifications**

- Master’s degree preferred;
- Experience building out ML infrastructure;
- Demonstrated ability to maintain a Git environment;
- Advanced knowledge of data-related Python packages.

**Personal skills and competencies**

- Self-starter mentality with the ability to proactively get on with work;
- A creative thinker, able to come up with innovative new ideas and solutions;
- Discretion and confidentiality;
- Excellent organisational and follow up skills.
How to apply

Applications should be submitted in English and by email only. The following set of documents is required:

- A cover letter explaining your suitability to fulfil this assignment (1-page limit)
- A personal CV/ summary of the team members CV, including past experiences in similar projects
- A financial proposal in CHF or USD of either daily or monthly rate

Complete applications should be sent to the Project Manager, Ms. Anna Brezhneva (anna.brezhneva@graduateinstitute.ch) with the subject “Application: Senior Data Architect”. Please include the required attachments merged into one PDF.

**Deadline for submissions: 23/12/2020 (midnight, CET).** Please note that incomplete or late applications will not be accepted.

We are committed to diversity and especially encourage members of underrepresented communities to apply.

Due to the large number of applications, we are only able to inform the successful candidates about the outcome or status of the selection process.