Data Architect

Current developments in dairy production technologies, concomitant with considerable data generation in different locations, indicate that there will be multiple dairy data aggregating systems across the world. Currently there is consensus on the need to establish bridges among these data clusters in the dairy sector, and develop processes to integrate this information aiming better data usability to promote profitability, sustainability, health and welfare in dairy herds.

Our client, The Council on Dairy Cattle Breeding (CDCB) is an industry collaboration managing the world’s largest database devoted to dairy cattle, providing gold standard genetic evaluations for the dairy community. CDCB is growing and currently have a mid-level opportunity for a Data Architect.

The Data Architect, will contribute to the development of CDCB’s data exchange service and the interface between the National Collaborator’s database and external systems that store, process or integrate dairy-related data. The data might originate from cloud-based data providers, farm management software, data stored in farms that are not subscribed to Dairy Herd Improvement Analysis (DHI) entities, and service providers (breeding management, etc.).

The Data Architect will perform the following tasks to meet CDCB’s goals:

**Essential Duties and Responsibilities:**

- Establish data architecture principles, create models of data that enable the implementation of the business architecture, generate diagrams displaying key data entities, and produce an inventory of the data needed to realize the architecture vision.
- Contribute substantially to the development and implementation of processes to integrate information to enhance data usability to promote profitability, sustainability, health and welfare regarding dairy herds.
- Provide data initiatives, evaluations, and guidance with projects in accordance with CDCB’s vision.
- Designing, creating, deploying and managing organizational data architecture
- Be an advocate for data governance, security, privacy and quality and ability to guarantee compliance with data governance and data security.
- Deliver difficult/sensitive information tactfully and utilize effective cross functional collaboration skills
- Thrive in a fast-paced, relatively unstructured work environment
- Collaborate effectively within the team environment
- Travel is required for meetings with stakeholders

The requirements listed below are representative of the knowledge, skill, and/or ability required to be successful in this role. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

**Education and Experience:**
Computer science, engineering or related fields degree. Post graduate degree is desirable. Knowledge and experience should include:

- In-depth knowledge and experience of data modeling and database design
- Ability to map the systems and interfaces to manage data, to set data management standards, and support the conception of projects to attain future outcomes.
- Strong experience in the following technologies: emerging tools, databases, predictive analytics, data visualization, and unstructured data.
- Capacity to envisage and describe the big data picture.
- Proficiency to document rationale for building block decisions in the data architecture definition document to ensure system sustainability
- Capable of defining how the data is stored, consumed, integrated and managed by different data entities and IT systems, as well as capacity to use applications using or processing the incumbent data.
- Proven direct working experience with data management concepts and activities, best practices for data sourcing, key data elements, data quality management and metadata.
- Excellent communication, inter-personal and cross-functional collaboration skills
- Experience with data issue identification, analysis, and remediation

The successful candidate must have excellent English skills with competency in oral and written communications. Candidates must also be able to occasionally lift up to 50 lbs.

**Salary and Benefits**
The Council on Dairy Cattle Breeding offers competitive compensation and a comprehensive benefit package that includes medical, dental, vision, short-term and long-term disability, life insurance, flexible spending, and 401k retirement savings plan. Our company also provides paid holidays and a generous paid time off program, a congenial work environment that fosters professional and personal growth.

**About CDCB**
Headquartered in Bowie, Maryland, The Council on Dairy Cattle Breeding is a 501 (c) (5) non-profit organization responsible for calculating and distributing the genetic evaluations and genomic predictions, for managing data storage, and for analyzing and distributing dairy cattle data in the United States. The CDCB is an industry collaboration that benefits the dairy community by providing gold standard genetic evaluations for the improvement of dairy cattle populations. The CDCB allied partners cooperator database is the largest in the world devoted to dairy cattle with over 95 million female phenotypic records, more than 3.6 million animal genotypes and over 500,000 bulls receiving genetic evaluations or genomic predictions. Additionally, genomic technologies amplified the opportunities for using genetic predicting models based on complex and difficult to measure phenotypes, generating an exponentially increased need for data in the dairy sector. On-farm data sensors, used in livestock precision farming, have become extremely sophisticated and have been widely adopted in the dairy sector, generating enormous quantities of data points yet marginally explored by centralized hubs. New data types include data generated by automated milking systems sensor devices, existing on-farm data management software, new analytical technologies for milk analyses, data generated by dairy data professional networks servicing dairy herds, and complex phenotypes generated at specialized dairy operations. Within
this context, the CDCB is expected to develop a new generation of data pipelines and
data analytical capacities on behalf of the U.S. dairy industry.

For further information please contact CDCB's Innovation Director at
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CDCB is an Equal Opportunity Employer