Internships at InfoCamere

Who is InfoCamere

InfoCamere S.C.p.A is the digital innovation company of the Italian Chambers of Commerce. It offers **digital services and solutions to businesses and the Public Administration**, and works to bring businesses and the Public Administration closer to each other. It is also responsible for the availability of the **Italian Business Register**, which is the archive of the "ID cards" of all the businesses in Italy.

The company is recognized for its commitment to **sustainability**. For the fourth consecutive year, InfoCamere has been recognized as a Leader in Sustainability. This recognition is a testament to InfoCamere's ongoing commitment to achieving a more sustainable social, economic, and environmental balance.

InfoCamere is also involved in **open innovation** initiatives. For example, the General Manager of InfoCamere recently authored an in-depth article on how the Public Administration can leverage Open Innovation to introduce artificial intelligence into its processes.

The company is located at Corso Stati Uniti 14, 35127 - Padova, but has other venues in Rome, Milan, and Bari.

Internships proposals

This is a list of internship topics proposed by the **Data Base Management Operating Unit**, which is part of the Technology Infrastructure Department.

#	Topic	Description	Technologies
1	**RAG with vector DBs for Semantic Search**	POC of RAG (Retrieval-Augmented Generation) with vector dbs to evolve the classic full-text search towards the recent and more advanced semantic search **#LLMs, #semanticSsearch, #vectorSearch, #hybridSearch, #vectorDBs, #RAG**	elasticsearch, Apache Solr, redis, mongoDB, PostgreSQL

2	**Containerized DBs**	POC of DBs living in a containerized/cloud environment **#cloud, #distributedDBs**	
3	**Event-oriented DB**	POC of ksqDB to provide current-state and past-state views over event-based DB changes **#kafka, #eventOriented**	
4	**DB changes re-engineering from triggers to event streaming**	POC to revisit a legacy trigger-based data changes' capture on an Oracle DB **#CDC, #oracle**	
5	**Postgres distributed on cloud**	POC of PostgreSQL HA cluster deployed on a geographically distributed cloud environment **#cloud, #distributedDBs**	
6	**CI/CD for DB changes**	POC of CI/CD solutions and policies in the DB management area **#automation, #versioning, #CI/CD**	
7	**Secure DBs on cloud env**	POC of a DB on cloud with high security requirements, explore everything that is needed to obtain this **#cloud, #db, #encryption, #security**	
8	**KMS for DBs**	Explore the adoption of a Key Management System to enable security features on different DBMSs **#security, #encryption, #kms, #d**b	

9	**Infra monitoring**	POC about enhancing the monitoring and issues prediction for the IT infrastructure **#monitoring, #machineLearning**	elastic
10	**CDC tools with multiple DBs**	Comparison and POC of Change Data Capture technologies to replicate data among different DBs / DBMSs **#CDC, #DBs**	kafka. ORACLE DATABASE PostgreSQL equalum mongoDB ORACLE GoldenGate CLOUDERA debeziun
11	**Graph DBMSs**	Comparison of graph DBMSs and migration study for an existing application **#graphDBs**	neo4j ArangoDB ORACLE DATABASE
12	**NewSQL**	POC of NewSQL technologies **#newsqlDBs**	NUODB CockroachDB VOLTDB
13	**Other ICT topics**	If you are passionate about network, database, systems, middleware, or other ICT topics: contact us and tell us what you are passionate about. We're open to new proposals!	YOU'RE WELCOME