# NESTOR

System for the management, processing, and complex analysis (and machine learning) of very large collections of data series (static, or streaming), by non-expert users.

ERGANEO
L'AVENIR EST FAIT D'AUDACE

PRESENTATION

NESTOR is a storage and retrieval system for complex analytics on big sequence collections. Data series (a.k.a. sequences, or time series) are present in virtually every domain (e.g., in Internet -of-Things, manufacturing, etc.). Several modern applications involve Terabytes of sequence data. NESTOR enables scientists to transparently use a specialized query processing systems for accessing their sequential data. NESTOR enables non-expert users to easily and efficiently conduct complex data analytics such as similarity search, motif discovery, clustering, classification and anomaly detection. NESTOR uses novel summarization, indexing, and analysis techniques for both reducing the size of data series, but also for allowing blazing fast analytics. NESTOR's storage layer continuously and adaptively reorganizes the underlying data layout to match the current workload, without incurring additional overhead.
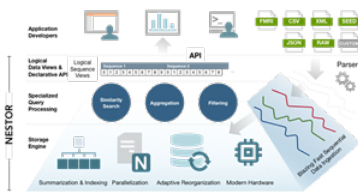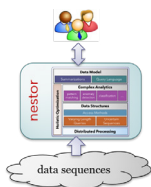
Data series / time series management system
Data series / time series complex analytics and machine learning
Large scale analytics - Pattern matching - Anomalies - Classification

APPLICATIONS

- Internet of Things
- Industrial production site monitoring
- Control systems such as SCADA
- Operation monitoring: aeronautics, automobiles, railways
- Smart cities / smart cars / smart buildings
- Health: monitoring physiological parameters

DEVELOPMENT PHASE

☑ Proof of concept based on large set of synthetic and real datasets (TRL6/7: technology demonstration/subsystem development)

COMPETITIVE ADVANTAGES

- Enables very fast complex analytics on very large sequence collections
- No prior knowledge of the domain is necessary
- Anomaly detection: no need of labeled instances (unsupervised method)
- Supports entire spectrum of very fast exact answers to ultra-fast approximate answers
- Approximate answers have deterministic, or probabilistic quality guarantees

INTELLECTUAL PROPERTY

Patent applications filled on May 2020 for the anomaly detection algorithms.

CONTACT

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PUBLICATIONS

Full list at: http://nestordb.com