Finch Computing: An Overview and an Update

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A Rebrand
85% of the world’s content is unstructured.

Analytics are too slow.

Real-time isn’t really.

We build solutions that address complex analytics needs - at various points in the software stack.
Big Data Analytics Continuum

- **Data Ingestion**
  - Allow analysts to do true analysis rather than prep
  - Word or numbers. Streaming or static. Internal or external.

- **Data Prep**
  - Proven approach, incredible accuracy (F-Scores)
  - Search + DBMS + Embedded, Predictive Analytics

- **Entity Extraction**
  - All in-memory, petabyte-scale data, prepare once, query infinitely
  - Streaming or static. Internal or external.

- **Disambiguation**
  - Search + DBMS + Embedded, Predictive Analytics

- **Linking**
  - Customizable, complex on-demand analytics

- **Contextual Analytics**
  - Customizable, complex on-demand analytics

- **BI Apps**

**Product**
- **Data Discovery & Data Transformer**
- **Finch for Text**
- **FinchDB**
- **Finch Analyst**

**Differentiator**
- Allow analysts to do true analysis rather than prep
- Proven approach, incredible accuracy (F-Scores)
- Search + DBMS + Embedded, Predictive Analytics
- Customizable, complex on-demand analytics
Introducing FinchDB

- An all-in-memory, NoSQL search and analytics platform with embedded analytics
- A JSON-style doc database
- Massively scalable in-memory compute platform
- Features extensible, in-database analytics
- Analytics embedded in database, but also in the models
- Capable of applying predictive analytics, on the fly, per transaction
- Distributed system, fault-tolerant, automatic failover
- An enabling platform technology upon which various solutions, satisfying a number of use cases can be met
Introducing Finch for Text

Finch for Text is an entity extraction and disambiguation service that employs natural language processing, sophisticated statistical models and other heuristics to extract eight distinct entity types from unstructured UTF-8 documents.

It identifies: people, places, organizations, cyber entities, IP addresses, phone numbers, currency values and, dates and times (including ranges).

By taking in all of the relevant context surrounding these entities, it correctly distinguishes between same-named or similarly named entities.

Finch for Text draws on a rich IP portfolio to offer:

- Extreme accuracy and precision.
- Easy customization, installation and use.
- The ability to write new applications utilizing its JSON outputs.
Entity Disambiguation and Why It Matters

- Understanding Finch for Text’s power, and ultimately its value, begins with the concept of entity disambiguation. Not entity-type matching, or entity-resolution.

- Disambiguation demands building algorithms that can – in an instant – process text and understand whether it is referring to George Washington the president, or George Washington the university... or the town of George, Washington ... or the George Washington Bridge in New York City.

- Disambiguation also means distinguishing between identically named entities of the same type. For example, John Roberts, the Chief Justice of the U.S. Supreme Court, or John Roberts, the Fox News correspondent.
Introducing Finch Analyst

- Finch Analyst is a **content enrichment** solution built for high-stakes, high-volume data environments.

- With an engaging, easily customizable interface, it finds hidden relationships in data from **15,000 news and information sources**.

- It reads **millions of unstructured documents** - news documents, blogs, websites – to the tune of approximately 1M documents every three days.

- It extracts **billions of entities** (people, places and organizations), and disambiguates them (**which** John Roberts, **which** Michelle Williams).

- Finch Analyst affords users the ability to conduct **sophisticated, real-time analysis** on a massive corpus of data.

- Its massive knowledge bases and sophisticated algorithmic data models deliver **accuracy and trust**.
Finch Computing Customers Do...

- **Geographic Discovery**: Finch for Text geotagged 85,000 documents in 30 minutes. It helped turn a one man-month project into an hour-long one. It prevented millions in redundant expenditures.

- **Entity Disambiguation**: Finch for Text disambiguates identically named people, places or organizations found in massive amounts of text. With unparalleled precision and recall. Whether the data is streaming or static.

- **Legal Intelligence**: FinchDB reprocesses the entire content library for a major legal information service provider. Every 30 minutes. Improving the data’s accuracy every time.

- **Predictive Analytics**: FinchDB applies predictive models on the fly. So it’s an attractive choice for retailers, insurers, regulators IoT device makers and more.

- **Content Delivery**: Real-time, personalized online ad delivery. To you. Not someone like you. It’s every marketer’s dream. FinchDB makes it possible.

- **Message Traffic**: Finch Analyst helps America’s intelligence community gain situational awareness – in situations that matter most.
LIVE DEMOS

Finch for Text

Finch Analyst
DISCUSSION