



The Franklin™ Platform

A Hybrid Neuro-Symbolic System

Entigenlogic® is an Artificial Intelligence (AI) software company that has developed an advanced contextual search solution available today that focuses on processing and understanding natural language. Its flagship product line, Franklin™, discovers relevant textual information across large, diverse datasets of unstructured digital data by capturing concepts and organizing them into knowledge graphs according to the true meaning of the words and mining valuable insights from their relationships. Franklin's combination of relevance and reasoning technologies produces industry-leading results. Franklin's core technology is deployed in the product offerings FranklinDiscovery™, FranklinWatch™, FranklinAuthor™, and others that provide compelling solutions.

Tom MacTavish
Chief Design Officer

01 Jun 2025



Entigenlogic® Franklin™

Software that Simplifies Knowledge Discovery

The Opportunity

The digital universe is growing 55-65 percent annually and 90 percent of its data is unstructured.¹ By 2025, IDC (International Data Corporation) estimates that approximately 180 zettabytes of data will be generated worldwide where 88 percent of the data will be unstructured. Since unstructured data is not organized in pre-defined formats, such as tables and data models, sophisticated language processing techniques are required to understand the data's meaning. Importantly, unstructured data contains a wealth of information about consumer behavior, market trends, and operational inefficiencies that can lead to profound and actionable insights.

Franklin empowers professionals across sectors to meet this challenge. For example: university researchers, solution architects, investigative legal teams, business development leads, and enterprise program managers use Franklin to uncover crucial insights buried in:

- Massive data repositories
- Inconsistent or domain-specific language
- High-velocity, real-time data streams

By accelerating discovery and interpretation, Franklin helps users detect meaningful patterns, act faster, and make smarter decisions in complex environments.

The Company

Entigenlogic was founded in 2017 and is an Artificial Intelligence software company based in Schaumburg, Illinois. Its team of data scientists, mathematicians, and software developers focus on advancing Natural Language Processing (NLP) toward Natural Language Understanding (NLU).

Entigenlogic's growing IP portfolio includes 50+ issued patents, 20 pending patents and 120 inventions with secured first to-file dates. The issued patents focus on Entigen technology. To learn more about Entigen, please view our 4-minute video by pasting this URL link to your browser:

<http://www.screencast.com/t/kSyQVzEpJG5> [Password: moviepassword1234]

Entigenlogic® enable the Franklin family of products to understand the fundamental structure of language and to understand the true meaning of words and the concepts they convey. Entigenlogic's unique approach to NLP

¹ <https://www.cio.com/article/220347/ai-unleashes-the-power-of-unstructured-data.html>



technology is the key to unlocking the true potential of Artificial Intelligence (AI). And the company's strong patent portfolio demonstrates that their innovative approach is well-defined and novel and puts Entigenlogic in a strong leadership position relative to existing NLP/NLU approaches.

Technology Summary

NLP research and development has been working toward the goal of enabling computers to understand humans in plain language since the 1950s. A majority of investments since the 1990s have been in probabilistic, neural network approaches, but they have not achieved the goal and continue to have well-known issues with brittle reasoning and expensive modeling costs. Entigenlogic has taken a more sophisticated approach by developing a hybrid neuro-symbolic system that leverages the state-of-the-art neural network systems combined with knowledge representation and reasoning technologies. This hybrid approach allows computers to logically connect concepts and build knowledge much as humans do.

Product Descriptions

FranklinDiscovery provides an interactive application presented as a workbench for creating and activating filters and for reviewing the resulting reports. It includes a workbench tool with basic and advanced user interfaces, interactive reports, an Ask feature for interactive queries of source documents, and administrative tools for augmenting knowledge bases and tracking system usage statistics.

FranklinWatch provides a capability to activate filters at pre-defined times against document repositories that are available or updated on a regular basis. For example, soliciting agencies may publish request for proposal documents daily or weekly and ask for timely public responses. FranklinWatch provides an alerting service that can inspect such proposal repositories and provide reports to product and service providers when there is a match against their service and product offerings. FranklinWatch provides a significant labor reduction for business development and sales personnel that are tasked with finding relevant proposals.

FranklinAuthor facilitates scholarly research and accelerates the writing process. By curating personalized document collections, researchers and authors can efficiently retrieve historical, obscure, and distributed references with precision. Users may design and refine custom filters or generate them automatically via natural language queries. These filters support the evaluation of aggregated content and the generation of descriptive text using large language models (e.g., ChatGPT, Claude). FranklinAuthor streamlines the progression from initial concept to publishable manuscript; publishing has never been easier!

Accuracy

Franklin's novel architecture delivers superior accuracy in document search and information retrieval by complementing mere statistical inference with the precisely articulated conceptual framework of knowledge graphs. The result is accuracy performance reliably above 90%.

Performance

Franklin products run on a broad spectrum of computing resources including laptops, servers and cloud-based systems. The practical performance constraint is the cost/benefit ratio of adding more virtual CPUs. Clients can process documents in a way and at a rate that best fits their business needs.



Transparency and Ethics

A major drawback to the current neural network approach is the “black box” problem - where the software is unable to explain how an answer was determined. This lack of transparency has become an increasingly important constraint with the advent of the European Union’s General Data Protection Regulation (GDPR). Article 22 of the GDPR states that individuals cannot be subject to a decision made as a result of automated data processing that legally affects or otherwise has a significant impact upon them. Several US states have similar rules in place.

The Entigenlogic system is inherently explainable. When there are questions, the factors considered and the reasoning that led to a particular conclusion are captured and can be reviewed. This is especially important in the financial, legal and healthcare domains where ethical codes are prominent and critical to public trust. It also applies to sectors where dire results may occur if improper or biased factors are included inadvertently. Franklin provides for transparency and verifiability to ensure that appropriate risk assessments and recommended actions can be understood before mass deployment.

Conclusion

Entigenlogic has developed a patented system that ingests, analyzes and stores text in a manner that allows for retrieval based on an understanding of the true meaning of words and the concepts they convey. The system accesses and understands documents in databases at scales that exceed human capacity and at levels of accuracy that regularly exceed 90 percent. It increases workforce efficiency by identifying, scoring, ranking and highlighting documents of interest from large databases. In early use cases, companies have used Franklin products for:

- Business Development
- Legal eDiscovery
- Scientific and Technical Search

Entigenlogic’s novel and patented approach to technology is providing the breakthrough in Artificial Intelligence in what Bill Gates referred to as: “when computers can read and understand information like humans do”.²

- Franklin finds relevant documents in databases without data labeling, training or modeling.
- Franklin scores and ranks documents so users can focus on content.
- Franklin provides natural language interrogation of large document sets.
- Because our technology does not require these expensive and time-consuming steps, Franklin allows tasks previously entrusted only to highly-paid and highly-experienced personnel to now be completed by less expensive and/or less experienced staff.
- Franklin delivers accuracy regularly exceeding 90 percent.

For more information, visit us at <https://www.entigenlogic.com>

² Gates, William, “Ask Me Anything” Reddit session, as reported in Forbes Tech Insider, Neil Bhavsar, 1 March 2017