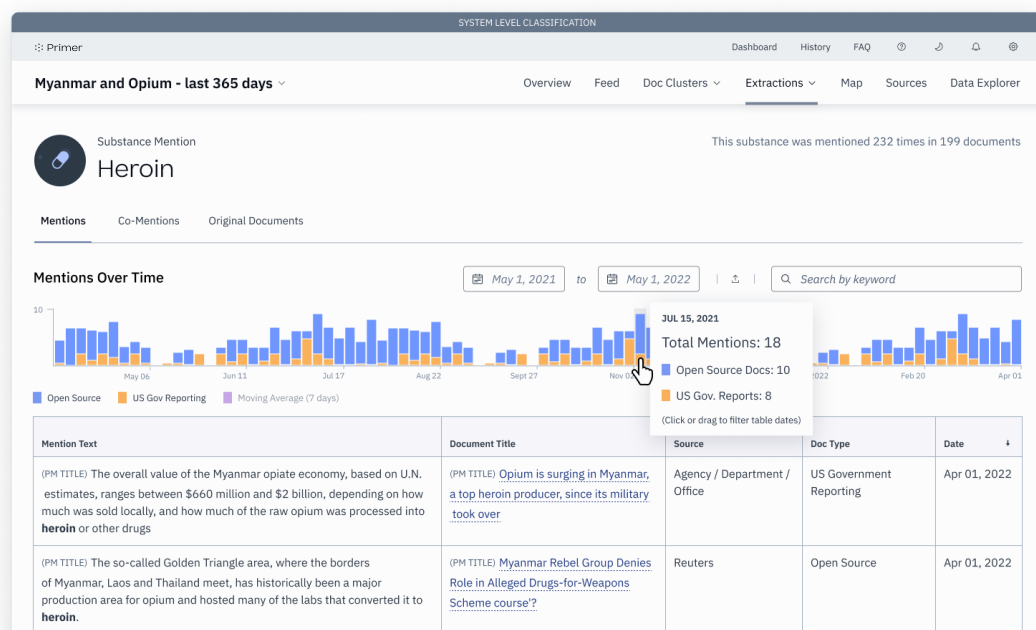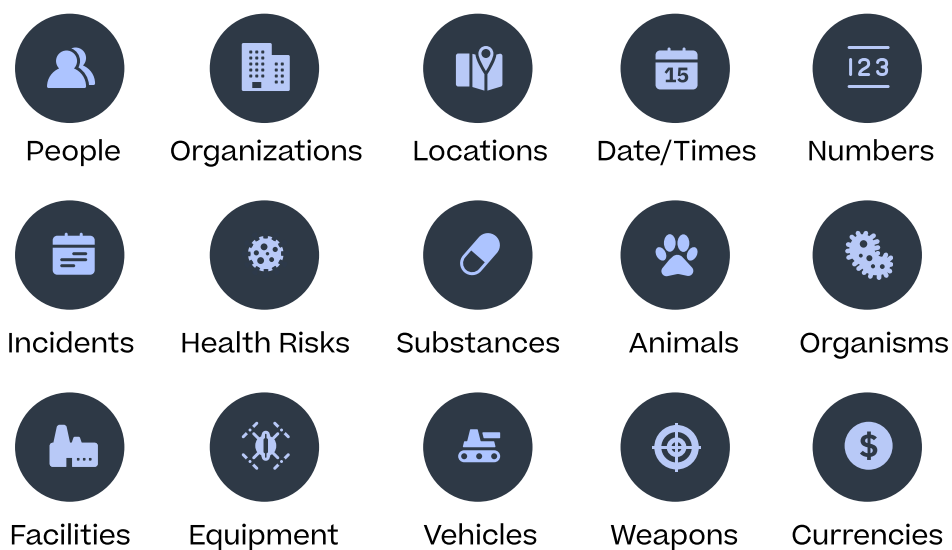∴∴ Primer

Performant & Cost Efficient NLP Model to Extract Insights Fast

Introduction

Organizations face an increasingly difficult challenge to quickly and cost efficiently process and understand an exponential amount of data every year. IDC estimates that by 2025, the world will generate 163 zettabytes of data annually, 80% of which will be unstructured. A manual approach can no longer keep up with the mounting complexities of today's digital world. AI is essential for understanding the vast amounts of data generated everyday. However, adopting AI requires significant effort and resources, including data management and model development. Clean and well-structured data is the foundation for effective AI models, and organizations must have the appropriate infrastructure to support data collection, storage, and analysis. Additionally, access to advanced and cost-effective ML/NLP models, and the ability to integrate them into existing systems, are key to driving mission value.

A Paradigm Change: Primer Big Model

Primer Big model is a cutting-edge natural language processing (NLP) technology purpose-built to help public sector organizations leverage classified and publicly available information. Developed in partnership with our national security customer, Primer Big model was built with resource constrained environments in mind where organizations may have limited access to GPUs. To drive this effort, seven disparate Primer NLP models were consolidated into a single model to limit the number of model inferences to extract information from text. In addition, Primer Big model is trained to support two languages - English and Mandarin for now and the roadmap is to enhance the capabilities to build a multilingual model.

People	Organizations	Locations	Date/Times	Numbers
Incidents	Health Risks	Substances	Animals	Organisms
Facilities	Equipment	Vehicles	Weapons	Currencies

Key Value Drivers of Primer Big Model:

- Built for resource constrained environments
- Pre-computes the 20 different custom entities for faster computing time thereby offering quick time to value
- Purpose-built for National Security use cases
- Trained on both publicly available information (PAI) and classified data sets
- Multilingual support (English, Mandarin)

::: Primer

Primer Delta: Unlock Decision Advantage Leveraging AI-Enabled Strategic Analysis

Surface insights from your data, on your network to help you with AI-enabled strategic analysis. Trained on both open-source and classified data, Primer Delta leverages Primer Big model to structure your data for interpretation, exploration and to surface entities you care about, dramatically reducing your time sifting through messy data to help aid in-depth strategic analysis for decision advantage. Developed in partnership with our national security customers, Primer Delta is accredited to run on a secure network and maintains custom connectors to work securely with your data stores.

Key Benefits of Primer Delta

- **Improve productivity by reducing manual tasks**: Primer structures classified and unclassified data for exploration and sense-making by clustering and summarizing all the relevant information containing entities that are most important to your work.

- **Discover insights on specific entities:** Primer generates mini-dossiers for each entity found in your documents, including every sentence mentioning the entity and relevant document source, and co-mentions with other entities.

- **Explore your data faster:** Primer pre-computes the 20 key entities, allowing you to get search results back instantly.

- **Fine-tune our model on your data:** Primer Big model is customizable and can be tuned for your use case on your data.

About Primer

Primer's AI technology is deployed by the U.S. Government and Fortune 100 companies to help analysts and operators extract timely insight and decision advantage from massive datasets. Primer has offices in Arlington, Virginia and San Francisco, California.

Contact us at https://primer.ai/contact/ or request a product demo.

What Primer's AI can do for you...

01 Cluster similar documents
We organize related documents into broad topics and time bound events.

02 Extract and aggregate insights
Easily find every sentence mentioning a person or org you are tracking.

03 Summarize everything
Single docs, topics, events, and all the key insights extracted from text.

04 Organize the data
All insights from all documents can be filtered and explored your way.