Primer: Overview

Primer is a venture backed San Francisco based machine intelligence company that uses machine learning and natural language processing to automate the analysis of large datasets. We build systems that read documents, make insights and write reports comparable to those of a human analyst.

Primer has raised $15 million in financing from top-tier venture capital funds such as Data Collective, Lux Capital, IQT, and Bloomberg Beta.
Primer: Team

36 of 47 employees are engineers

Deep ML/NLP Experience

8 PhDs

Diverse Expertise:
- Stanford AI and Statistics
- Computational Biology
- Chemistry
- Astrophysics
- Social Media Analysis
- Data journalism
- Data visualization
**Primer: Products and Use Cases**

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<td>Synthesis, summarization, and analysis of news data and proprietary unstructured/structured text data within a government’s firewall/data center</td>
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<td>Fortune 50</td>
<td>Consumer insights and macro trends Media monitoring of company and competition Email and document analysis and classification</td>
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Core Capabilities

MEDIA COVERAGE OF СИРИЯ (SYRIA) FEB-APR 2017
17,483 Russian and 19,585 English documents analyzed. CPU time 112s

Overview
Russian and English media coverage of Syria differed significantly between 1 February and 31 March 2017. In Russian media, the most defining event was “Putin says 4000 Russians fighting in Syria” on 23 February. Unfortunately Syria has accumulated a huge number of militants, natives of the former Soviet Union and of Russia itself.” Russian President Vladimir Putin was quoted as saying. English media, meanwhile, was dominated by the events “Trump’s new Travel Ban Executive Order” and “Al Qaeda leader Abu al Khayr al-Masri killed in US drone strike.”

Key Events
Russian media coverage peaked with a cluster of events starting 20 February which included “Four Russian military killed in Syria” and “Another Russian soldier killed.” The second most dominant Russian-only event was “Military police from Ingushetia will replace Chechens in Syria” on 13 February. Ingushetia President Yunus-Bek Yevkurov was quoted as saying. “A military police battalion serving the Ministry of Defense of the Russian Federation has been sent from Ingushetia to the Syrian Arab Republic with a peacekeeping mission.” The key number for this event was “500 soldiers.”

Locations
Syria, particularly Damascus and Al-Bab, dominated both English and Russian media. But Russian coverage included major events elsewhere. The Russian-only media topic with the most global spread was “ISIL and Courts”, which included the events “Migrants detained on Dukha as for complicity to aid ISIL”, “Russian police detain Kurkz and Russian citizens in terrorism plot”, and “Seven detained in Chechnya attempting to join ISIL in Syria”. In the most widely cited quote is Putin said. “Given the fact that we have a visa-free regime between almost all the countries of the former Soviet Union, we understand what a great danger lurks in this hotbed of terrorism.”

People
The person most frequently quoted only by Russian media was Russian Minister of Defense Sergey Shoigu. He is associated with the event “Shoigu says Syria saved Syria from disintegration” and was quoted as saying: “The main event of last year was the liberation of Aleppo, considered the second capital of Syria and the largest industrial center. This victory has not only military, but also the most important political significance for the whole country.” The person most often quoted with Shoigu was Putin, who said, “We do not set for ourselves the task of interfering in the internal affairs of Syria. Our objective is to stabilize the country’s legitimate government and to deliver a decisive blow to international terrorism.” The most prominent person in English media never quoted by Russian journalists in this period was US President Donald Trump.

Key Stats
172 total events detected in this period
25 events covered by both media
71 events covered only by the English media
76 events covered only by the Russian media
# Information Extraction

Extract and resolve a wide variety of information from unstructured text

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Information Retrieval

We have a range of search capabilities including:

1. Entity Based Search
2. Query Expansion / Reduction
3. Semantic Search
Human-In-The-Loop

We’ve built out active learning, semi-supervised learning, and distant supervision capabilities to maximize the value of human-in-the-loop interactions.
Narrative Generation

1. Summarization (abstractive and extractive)
   a. Single Document
   b. Multi-Document
2. Time Series Analysis
3. Geographic analysis
4. Information Visualization
5. Cross Language Corpus Comparison
Example Outputs
More Consumers to Show Their Love With Candy This Valentine’s Day

Summary

With 55 percent of the population celebrating this year, spending will increase from last year’s $136.57. In total, spending is expected to reach $19.6 billion, up from $18.2 billion in 2017. “Americans are looking forward to pampering and indulging their loved ones with flowers, candy, dinner and all of the other Valentine’s Day stops,” NRF President and CEO Matthew Shay said. More consumers plan on purchasing candy this year, with 55 percent (up from 50 percent in 2017) saying they will give gifts of candy for a total of $1.8 billion.

Key Findings

If U.S. consumers had to put a price tag on their affections this Valentine’s Day, it would equate to an average of $143.56, according to the National Retail Federation (NRF) and Prosper Insights & Analytics.

Even those foregoing Valentine’s Day festivities won’t be left out: more than a quarter (27 percent) of consumers who are not observing the holiday have an alternative in mind such as treating themselves in some way, or getting together with family and friends.

Key Numbers

When it comes to what gifts consumers plan to spend money on, 19 percent will spend $4.7 billion on jewelry; 35 percent will spend $3.7 billion on an evening out; 36 percent will spend $2 billion on flowers; 17 percent will spend $1.9 billion on clothing; 15 percent will spend $1.5 billion on gift cards/gift certificates; and 46 percent will spend $894 million on greeting cards.

The NRF and Prosper Insights & Analytics survey was conducted Jan. 3-10, polling 7,277 consumers about their Valentine’s Day plans.

Perspectives

“In America, the chocolate market enjoys incredible mass appeal, attracting everyone from high-end chocolate connoisseurs to the proverbial kids in a candy store to the amorous crowd purchasing sweets for their sweethearts or even themselves during Valentine’s Day.” - David Sprinkle, research director for Packaged Facts

“Valentine’s Day has become a holiday consumers take advantage of not only to spoil their loved ones but themselves.” - Phil Rist
Corporate Media Monitoring

Trump wants to deliver Blue Apron-style 'America's Harvest Box' to food-stamp recipients
This event appeared on February 12, 2018 and was broadcast in 108 articles.

Summary
Under the proposal, households receiving $90 or more a month in SNAP benefits would be given the box of food, which would be 100% American grown. An estimated 42 million people, or roughly 13% of Americans, receive food stamps, according to the USDA. The reformed program, which includes the so-called "America's Harvest Box" that households getting more than $90 a month in SNAP benefits would receive, would save an estimated $214 billion over a decade, according to the administration's budget.

Event Statistics
- appeared on February 12th 2018 with 108 articles (13 unique)
- shared 28.4k times and ranked 12th of 184 events in the last month
- the largest of two events in the topic "Blue Apron & Trump"
- new since last view and occurred in the last 48 hours
- driven by the people Donald Trump and Mick Mulvaney
- is predicted to grow by at least 12 unique articles in the next 20 hours

Numbers
- at least $90 51 occurrences
  Families who would get the box of food would be ones who currently get at least $90 a month.
- $125 41 occurrences
  SNAP provides an average of $125 per month to 42.2 million Americans.
- more than $213.5 billion 41 occurrences
  Trump’s budget proposal calls for additional cuts of more than $213.5 billion over the next decade to SNAP, a reduction of nearly 30 percent, according to the Center on Budget and Policy Priorities.
Generated Wikipedia Profile: Janet Kelso

Janet Kelso is a computational biologist at the Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany. Kelso's research focuses on the functional importance of genes inherited from archaic humans. She has authored 513 papers that have been cited 21,511 times.

Kelso led a study published 7 January 2016 in the American Journal of Human Genetics that was extensively covered by the media. Kelso’s team scanned the genomes of modern day humans for evidence of Neanderthal or Denisovan genes and then looked at how common they were in people from around the world. Among the three immune system genes that stood out, two closely matched Neanderthal DNA. The archaic variants of these genes make modern human cells more reactive to invading bacteria, fungi, and parasites. People with the borrowed toll-like receptor (TLR) clusters tend to have elevated allergies to dust and pollen. The discovery sheds light on how much human breeding with other early species may have affected our evolution.

2. "Janet Kelso" results from Semantic Scholar, accessed 18 July 2017
4. "Human-Neanderthal relationships may be at root of modern allergies," The Guardian, 7 January 2016
Thank you!

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