Zemanta
an Outbrain Company

Artificially Intelligent Online Advertising

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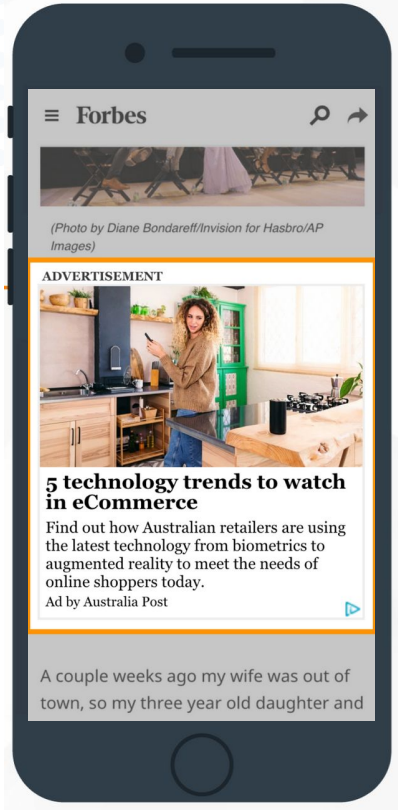
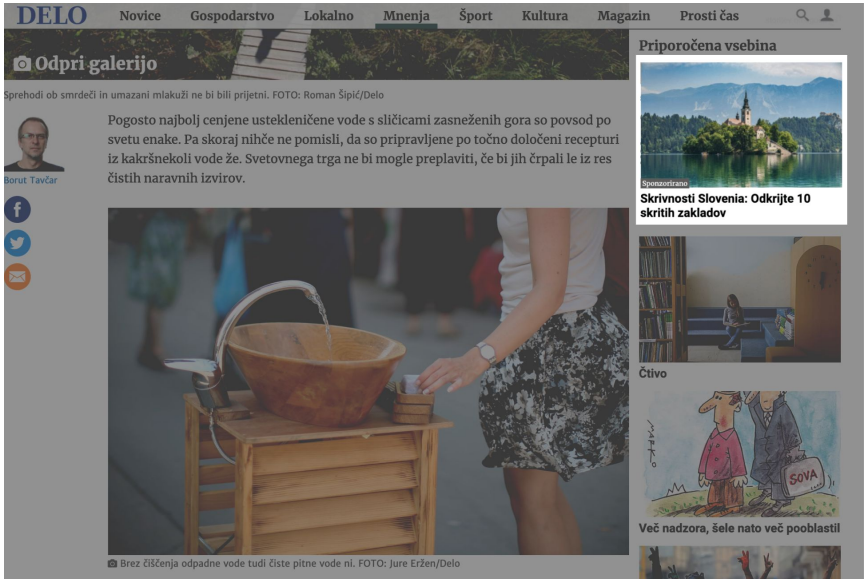
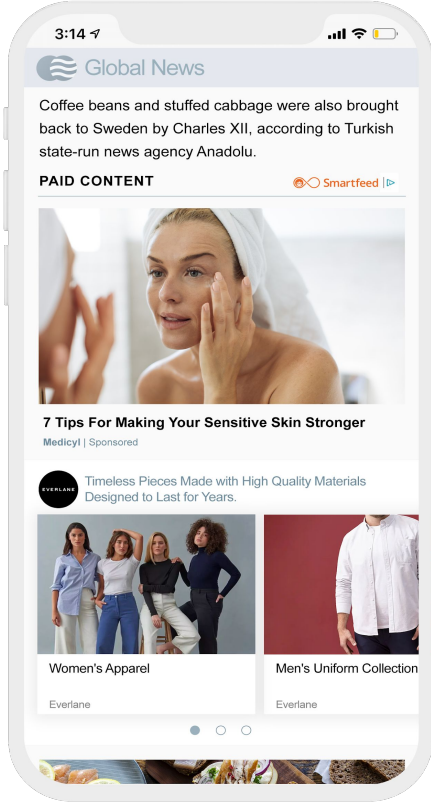
Head of Data Science







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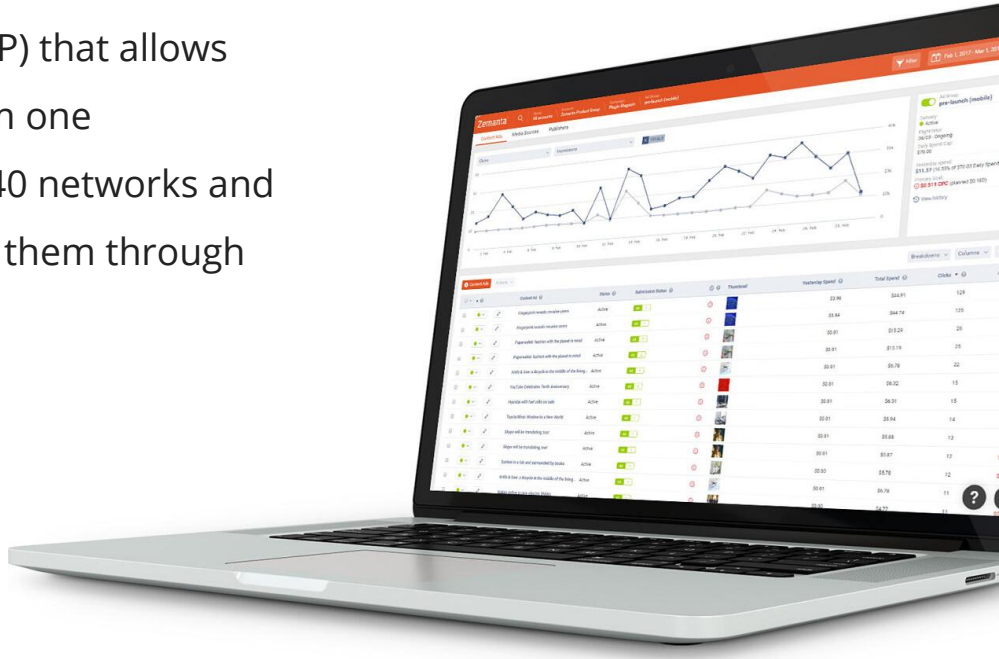
WHAT IS ZEMANTA?

Zemanta is a **Demand Side Platform** (DSP) that allows you to manage all your media buying from one dashboard. It is connected to more than 40 networks and enables **programmatic** access to each of them through one interface.



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Brands and Agencies

Of all shapes and sizes.

Nestlé

vodafone

NISSAN

VISA

Supply at scale.

Access to some of the most premium websites and news feeds in the world.

CNN

theguardian

msn

BBC

DELO

DNEVNIK

VEČER

24.COM UR

What is Real Time Bidding?

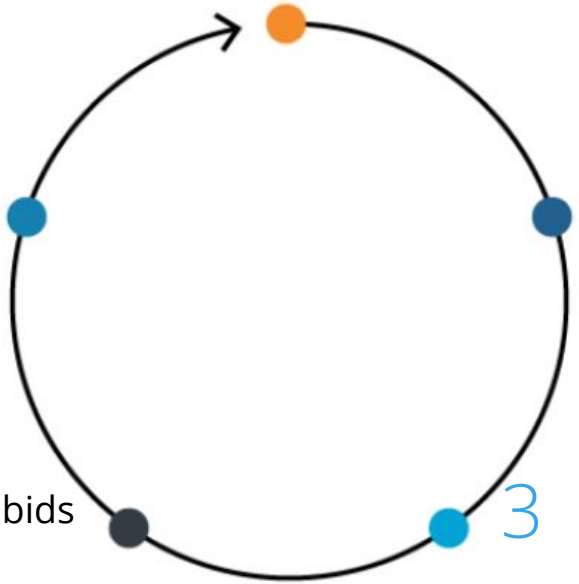
1 **User** visits a **website.**

2 **Exchange** announces available **ad placement** to Zemanta.

3 Zemanta **evaluates all applicable ads** and bids with the best ad.

4 **Auction** of all bids takes place.

5 Winning **ad is served** by the exchange and **notifies Zemanta** about the served ad.



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Bidding at scale

Bidding on advertising space is at the **core of our product**

It is fueled by our **Machine Learning** algorithms

~800.000 bid requests - **per second**

100ms **response time** - including network latency

7 data centers around the globe

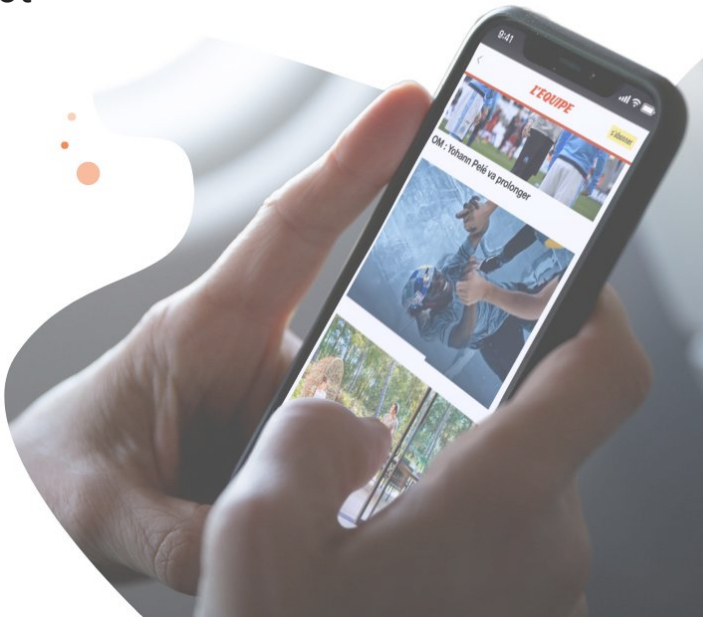
100+ TB of **data** generated per day - compressed

Where does Machine Learning/AI come into play?

Machine Learning is **embedded into everything** we do.

Use cases include:

- Autonomous advertising campaign optimization - Autopilot
  - Intelligent budget distribution
  - Optimal pricing
- Bidding on advertising space in real-time
- Fraudulent and non-human traffic detection
  - Analysing patterns in our network



APACHE kafka®

TensorFlow

hadoop

VOWPAL WABBIT

Amazon S3

GO

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AEROSPIKE

aws

Google Cloud Platform

Google BigQuery