



# Building a fair judge using Artificial Intelligence

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## Top 4 problems with human Jury's



Personal relationships



Decision fatigue

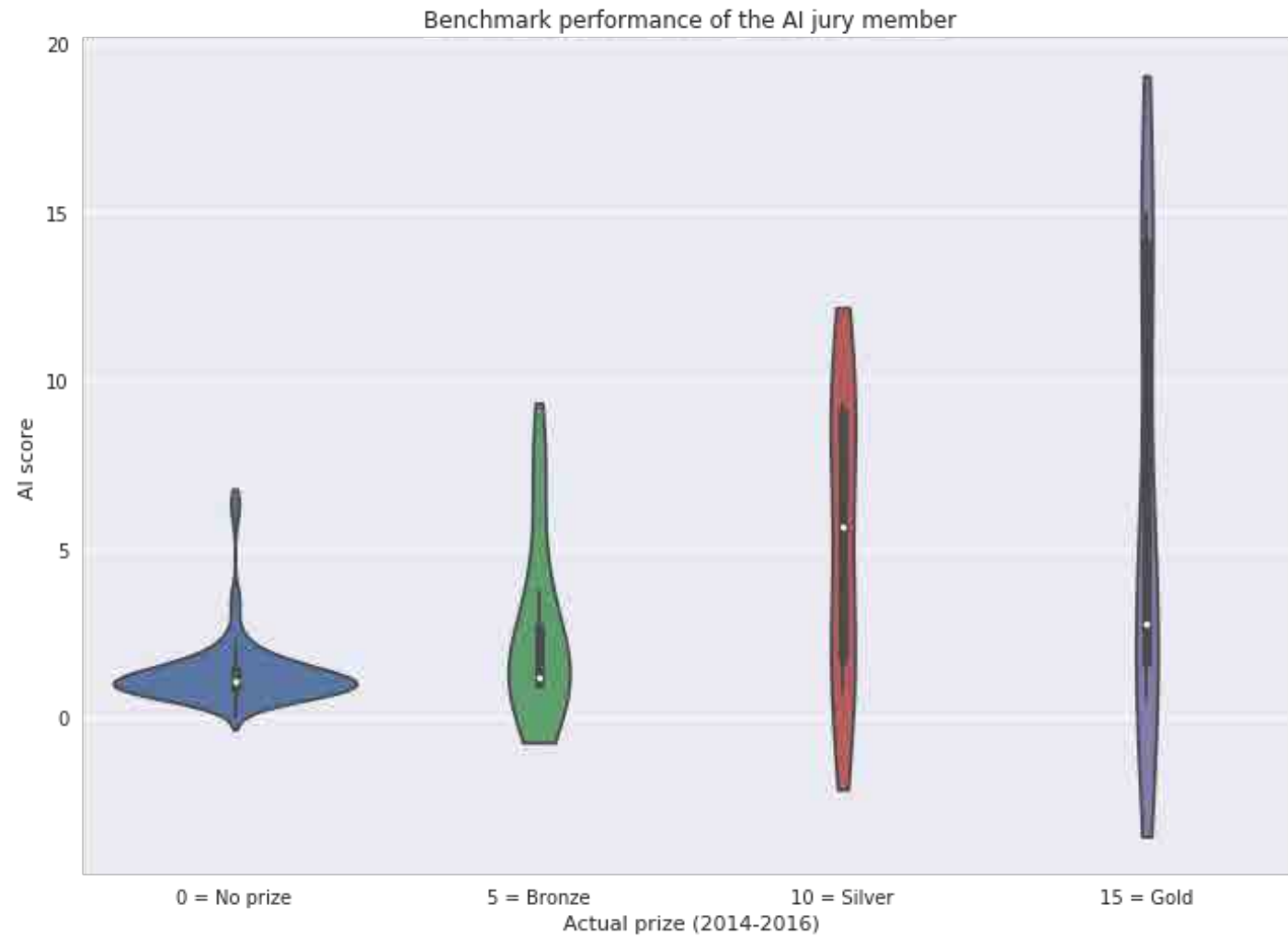


Inconsistent

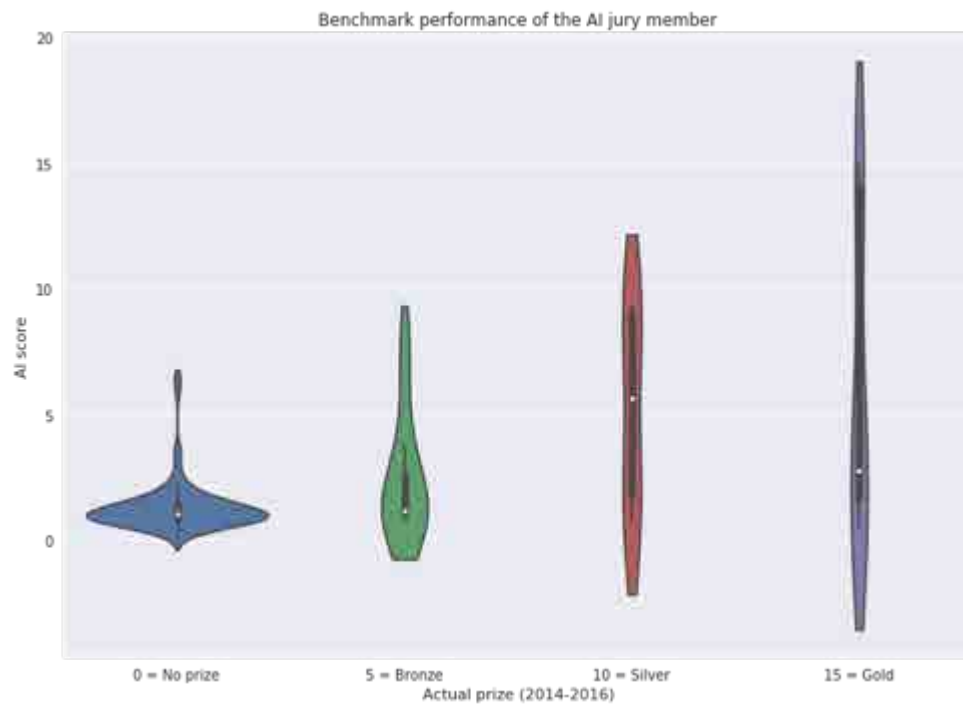


Distraction

# Results



## Results



Understanding

## Over 50% correlation

In the end, there was a correlation of over 50 % of the predicted results with the actual award scores. It is interesting to see the large variance in predicted scores for winners of prizes: they really stand out.

Modelling approach

## Three data sources

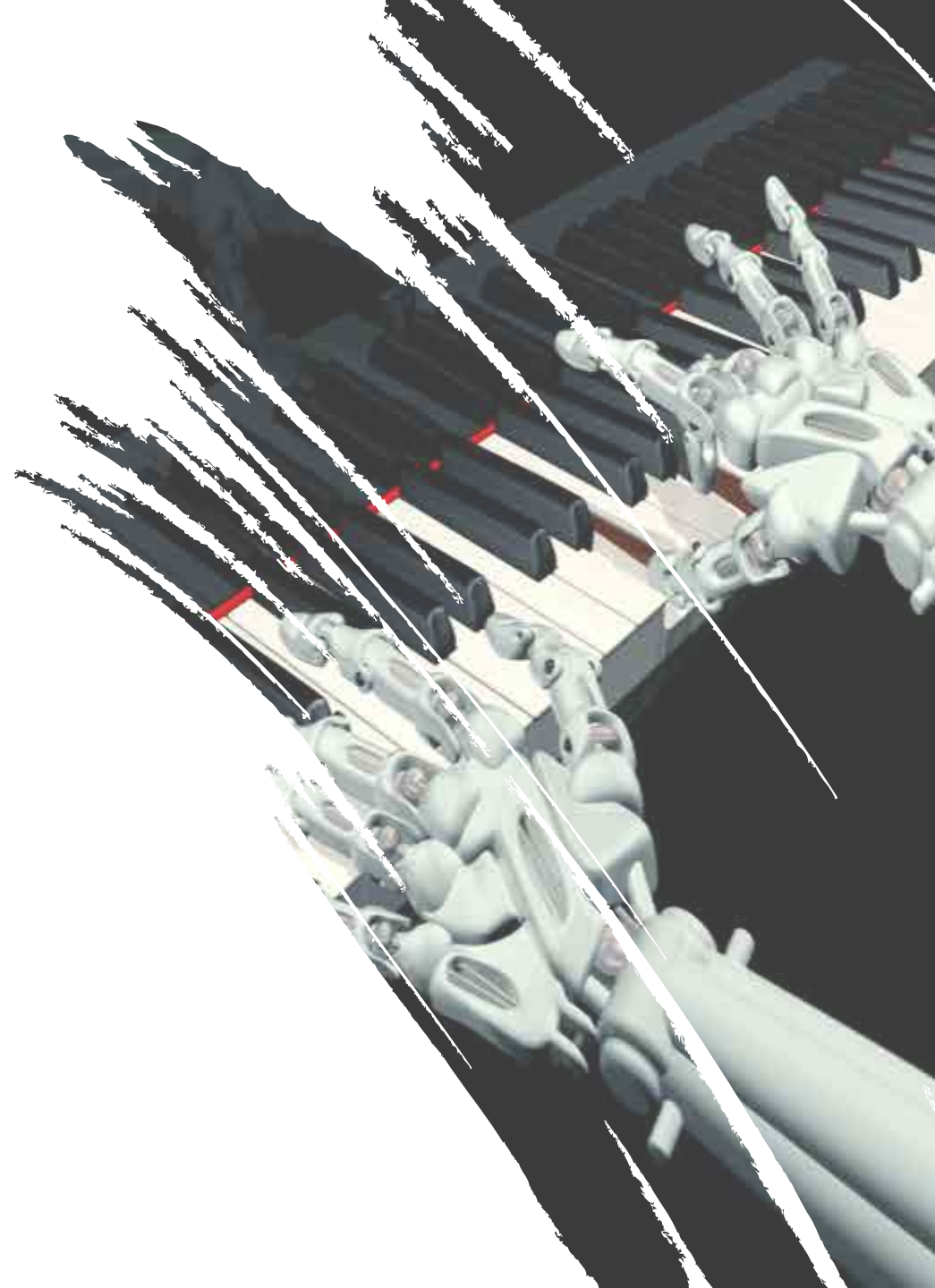
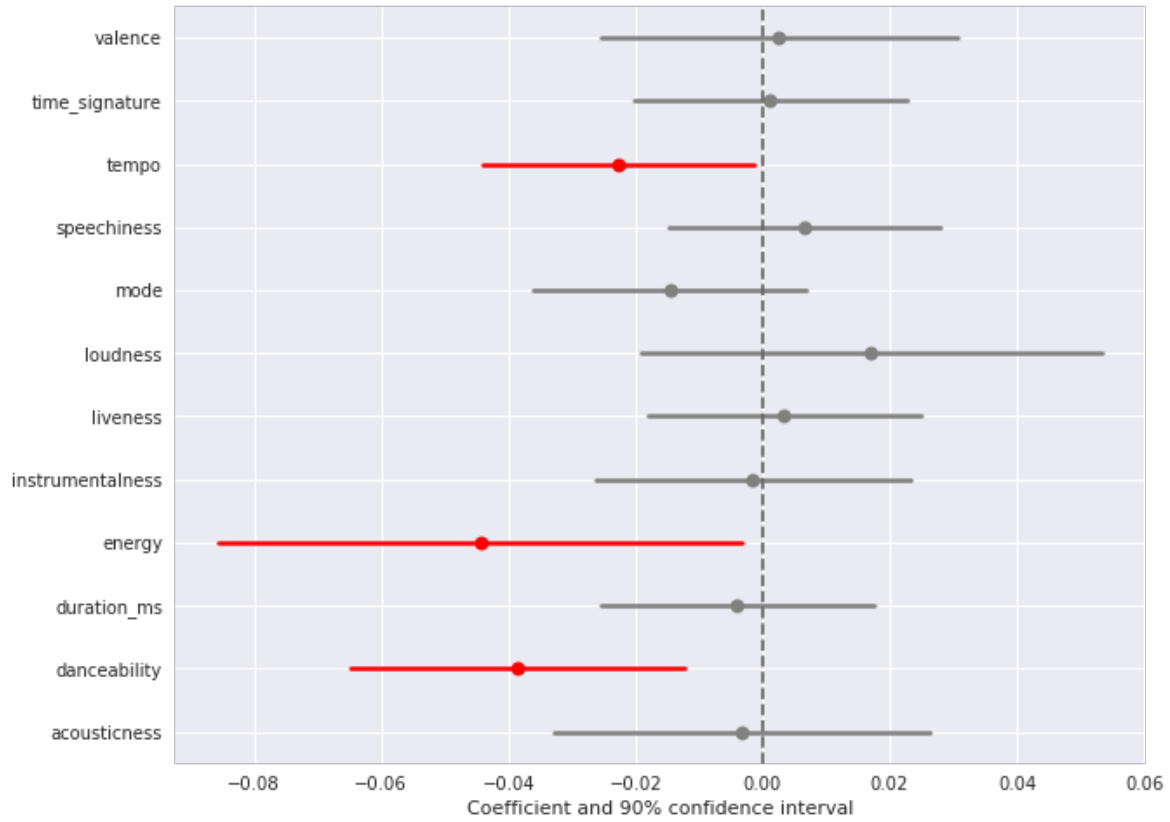
The model consisted of three major parts: analyzing the audio, the video and the submission text. Every part required a different, specialized modelling technique.



Partners



# Soundtrack and audio effects



# Modelling text with TensorFlow™

## Word2vec projections

Numerical vectors that describe the meaning of the word. Created by large text corpora and huge amounts of processing power. These make the computations feasible. Word vectors can be reused in multiple use cases.



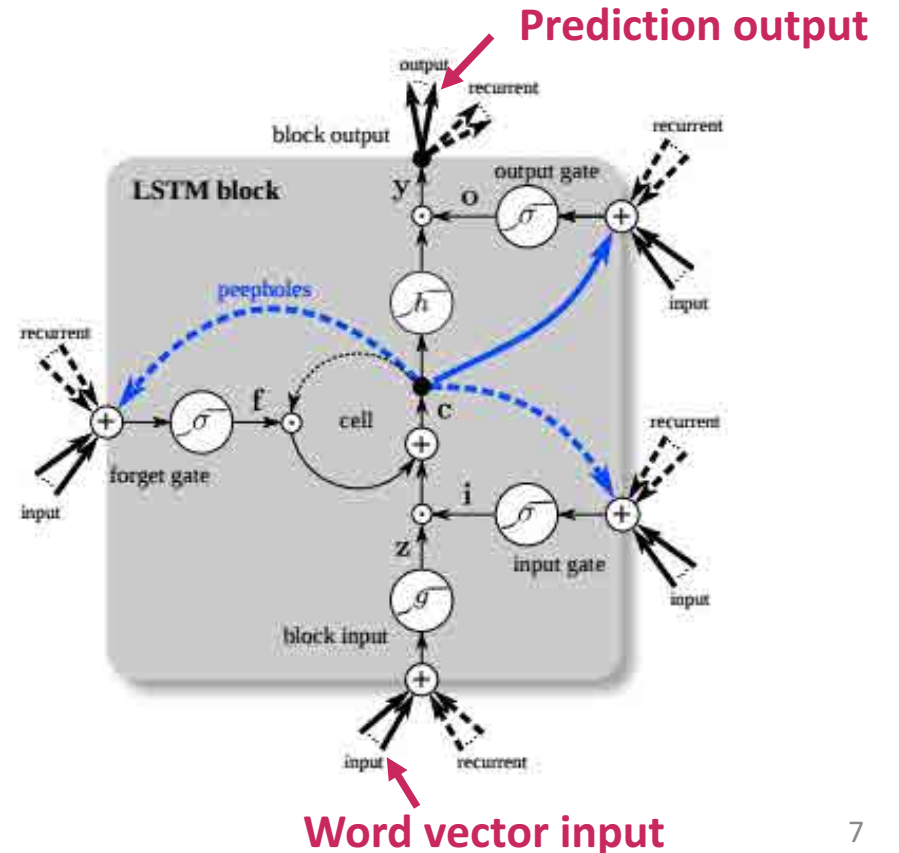
## Long-Short Term Memory model

Deep learning technique that works on word sequences (sentences) of arbitrary length. The model decides which information is relevant for each application. This has to be re-trained for every use case.

### 300 'meaning' dimensions

word	Male/female	name	regalness	...
King	0	0	1	...
Queen	1	0	1	...
Porsche	0.3	0.2	0.3	...
Fiat 500	0.6	0	0	...
Lieselotte	1	1	0.1	...
Elizabeth	1	1	0.4	...
...	...	...	...	...

1.6 million words



Creative approach:

Driveclub makes you feel the **exhilaration** of driving the **most powerful** and **beautifully designed cars** in the world. And what better way to show that to the players, than by putting them in real supercars?

That's why we decided to demonstrate the power of **social** in this campaign by launching the Supercar Services. We offered **people** the chance to benefit from one of our exciting services, like going to their **favorite nightclub** with five super cars, receiving their first driving lesson in a Jaguar or waking up a **friend** with the **noise of roaring engines**. In order to access the Supercar services platform, unlock and book them on the **website**, the participants only had to create a team (from their network) on the landing page.

The campaign was launched through a **teaser movie** that explained the first service "Players become players", in which a **gamer experiences** the effect of a supercar when he's hitting the club and in which the viewer was asked to book his or her service. **Online** display and all other PlayStation channels (blog, website, YouTube channel, CRM) supported the **online** launch.

Innovation:

Social sharing. To demonstrate the power of social, we didn't only go on the **social media** platforms, we started from what social nowadays really means to people: a focus on the interaction and above all, on the network. By letting them experience the power of their own digital social network in an exciting way, we could already give them a sense of excitement that the Driveclub social racing game could procure them.

Engagement results:

PlayStation exceeded their sales target by almost 10%. We got **120.000 views** on the Supercar Services trailer. Over **10.000 people** registered on the landing page. We counted over **3000 participants** during the live services and of course, we got **press coverage** in several national newspapers and gaming blogs.



# Insights from video

## Content

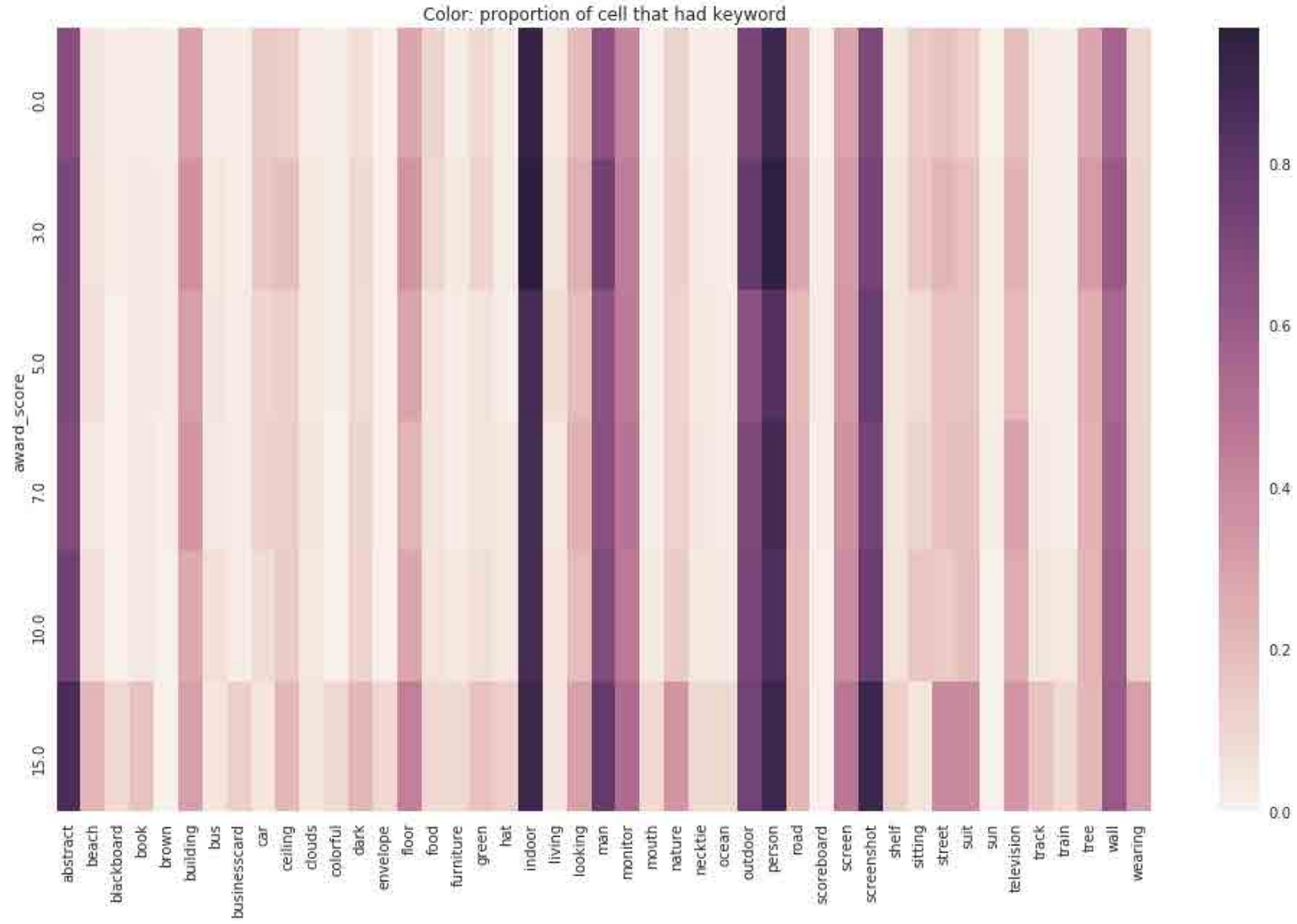
Visual content  
Number of people  
OCR on text  
Number of men  
Transcript

## Video style

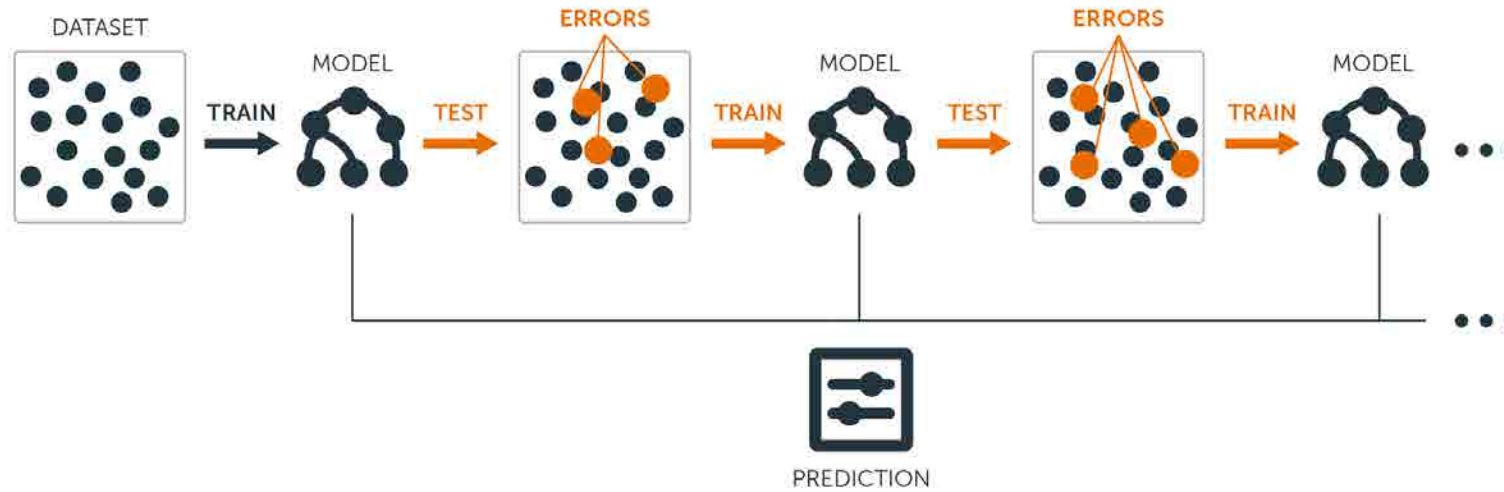
Number of keyframes  
Silence  
Handclaps  
Length  
Sentiment

	Positive sentiment	neutral sentiment	# people	# women > 50y	Has suits	...	Has trees	Seconds of silence	Handclaps (s)	# of keyframes
Campaign 1	78%	9%	15	14	0	...	yes	12	0	15
Campaign 2	11%	0%	120	12	2	...	yes	1.4	0	55
Campaign 3	67%	56%	44	12	1	...	no	5.6	9	23
Campaign 4	22%	29%	2	0	2	...	no	120	0	6

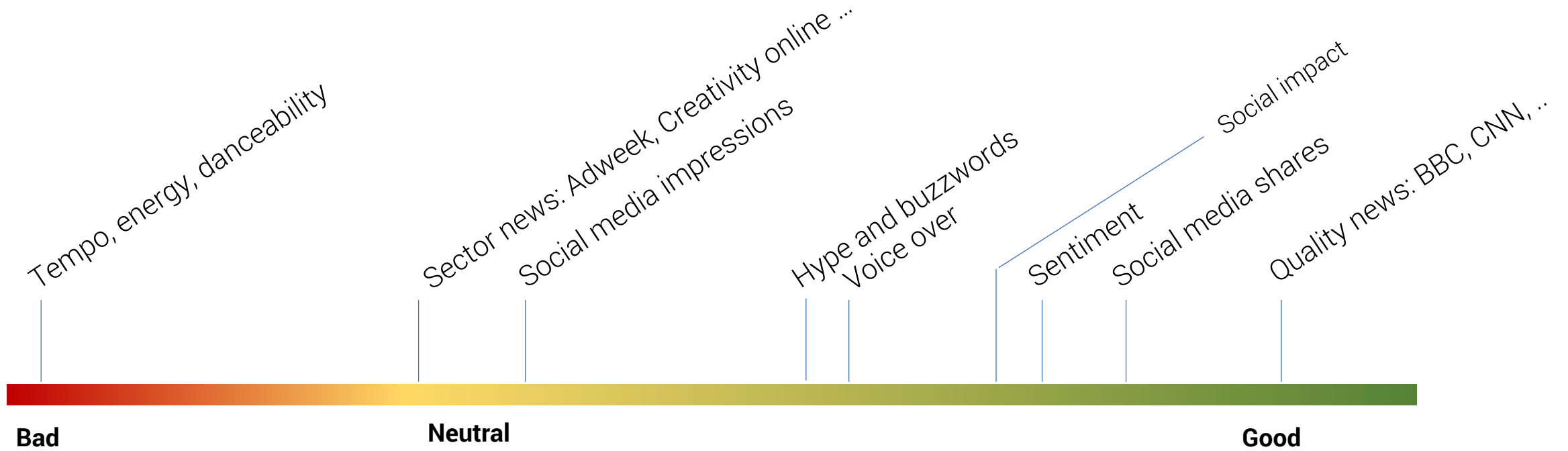
# Video



# Combine three models into 1 super model



# Learnings



touché pas à  
MA POTE

Winning case



toucher pas à  
MA POTE

**Why this case?**

Reach + Sentiment

EMERGING TECH

# Does Pearl, the First A.I. Ad Awards Juror, Know a Thing About Creativity?

Probably not much, but she is learning

By Tim Nudd | September 20, 2017



Microsoft News Centre Europe

AI Cloud Consumer Education Industry Social Impact Startups About Microsoft in Europe

## Meet Pearl – an AI judge who is already dishing out awards



Posted 30/10/2017 by Microsoft Reporter

Pearl isn't your average judge. She's not human, for a start. She has no body, no face, no desire to drink coffee or eat pasta, or even watch cat videos on YouTube.

She is, in fact, a specially designed AI juror. Created by Belgian AI engineering service provider Faction XYZ and advertising agency DDS, Pearl has one purpose – to impartially, and without bias, select the best advertising campaigns in the world.

## Belg ontwikkelt eerste artificiële jurylid 'Pearl' Robot zou Miss België 'eerlijker' verkiezen

Ze is altijd objectief, nooit afgewerd en heeft geen verborgen agenda. Pearl is het eerste artificiële jurylid ooit en werd ontvankelijk door Jos Polfliet van het Antwerpse bedrijf Faction XYZ. In de toekomst moet ze kunnen worden ingezet bij verschillende wedstrijden. Zoals Miss België.

...omzetverdiend en kan geen ...  
...volwassen, maar ...

### Werk together

In de toekomst moet Pearl samen met andere juryleden bij belangrijke wedstrijden, zoals Miss België, worden ingezet. "Het is perfect mogelijk. Het jaar erop wordt het zelfs de moeite van het overwegen waard om Pearl te gebruiken voor andere wedstrijden, zoals de provincie- en lokale wedstrijden. Het is niet zeker of Pearl zal worden ingezet bij de provincie- en lokale wedstrijden, maar het is zeker mogelijk dat Pearl zal worden ingezet bij de provincie- en lokale wedstrijden."



JOS POLFLIET

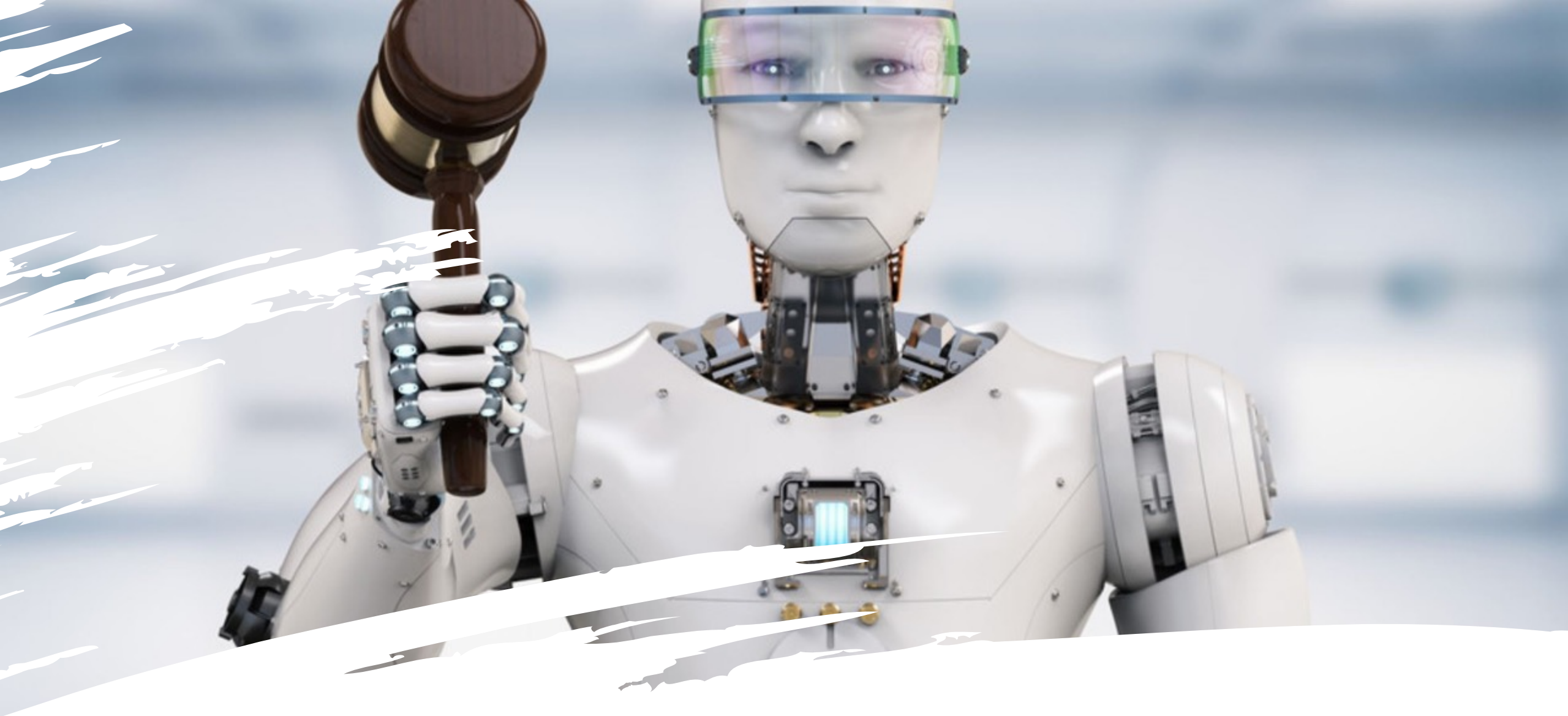
"Pearl kan uit 10.000 kanshebbers snel honderd papieren kandidaten selecteren"

1. Pearl selecteert uit 10.000 kanshebbers honderd papieren kandidaten.

2. Pearl selecteert uit de honderd papieren kandidaten de beste kandidaten.

3. Pearl selecteert de beste kandidaten.



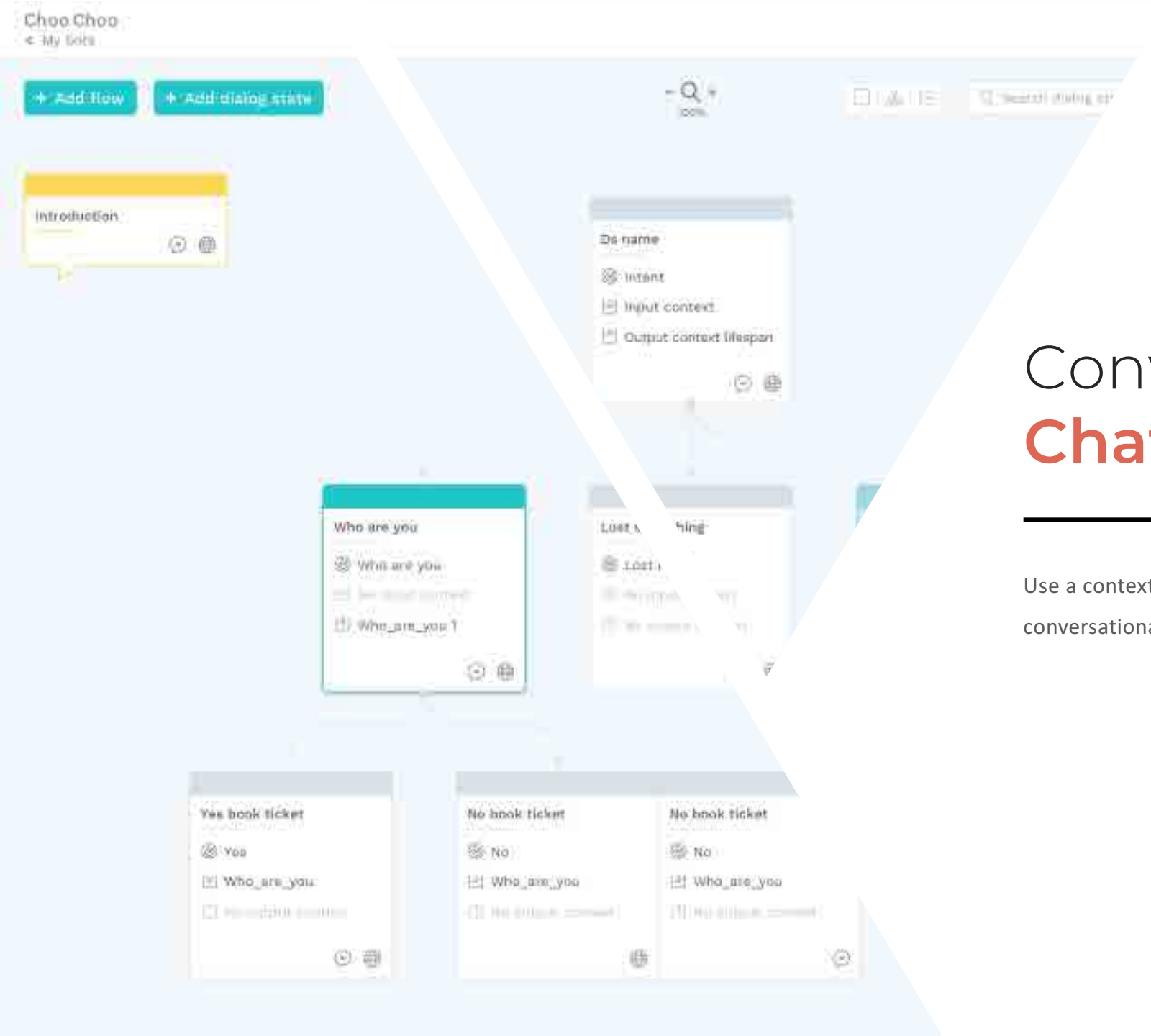


**What is next?**

# Hi, we are Faktion

**We are an applied A.I. service provider**

<http://www.faktion.com> - @factionxyz

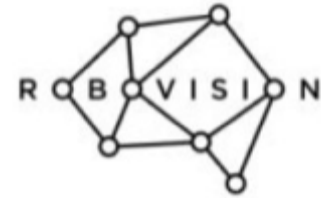


# Conversational agents: **Chatlayer**

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Use a context-aware natural language processing (NLP) to build enterprise graded conversational solutions.

Don't panic  
you are not alone



BRIDGESTONE





**No more bullsh\*t !**

Artificial Intelligence is confusing. We know. Truth is, there is money to be made by selling hype. Contact us when you need a partner that delivers results instead.

**Thank you**

We are an Applied A.I. boutique firm that combines strong business acumen with technical mastery. We've been doing so for some of world's largest companies.

With specializations in natural language, signal data and computer vision, we support our customers from strategy and engineering, all the way to the integration into their business processes.

Come on. Challenge us. We'd love to explore what we can do for you.



**FAKTION**