

# Robo-Journalismus

AI in Unternehmenskommunikation und Journalismus



# Robo-Journalismus

## AI in Unternehmenskommunikation und Journalismus - Intro

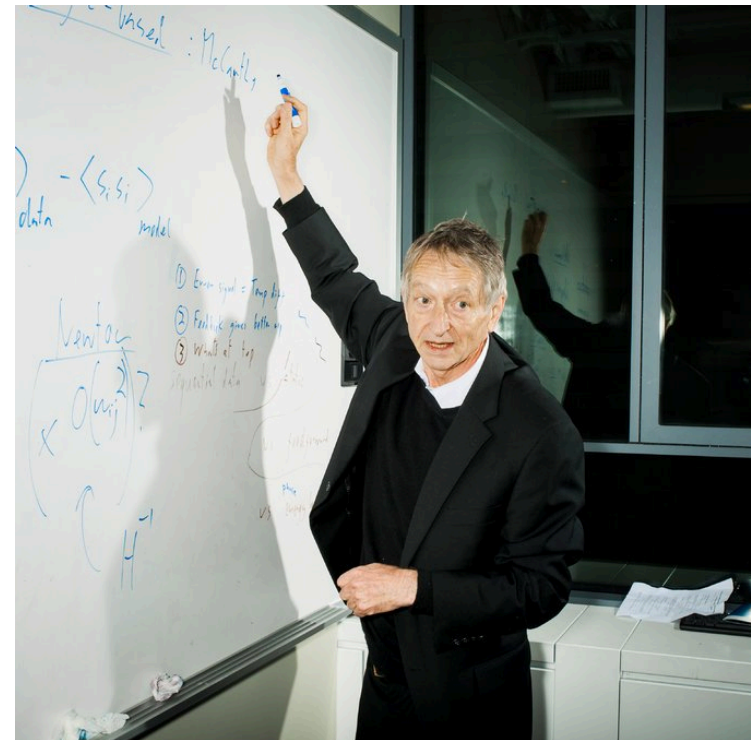


### NO. 1:

Kilimanjaro is a snow-covered mountain 19,710 feet high, and is said to be the highest mountain in Africa. Its western summit is called the Masai "Ngaje Ngai," the House of God. Close to the western summit there is the dried and frozen carcass of a leopard. No one has explained what the leopard was seeking at that altitude.

### NO. 2:

Kilimanjaro is a mountain of 19,710 feet covered with snow and is said to be the highest mountain in Africa. The summit of the west is called "Ngaje Ngai" in Masai, the house of God. Near the top of the west there is a dry and frozen dead body of leopard. No one has ever explained what leopard wanted at that altitude.



Geoffrey Hinton, whose ideas helped lay the foundation for the neural-network approach to Google Translate, at Google's offices in Toronto

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AI in Unternehmenskommunikation und Journalismus – **Text Generation**



GPT2 models “were **12 times bigger**, and the **dataset was 15 times bigger and much broader**” than the previous state-of-the-art AI model. It was trained on a dataset containing about 10m articles, selected by trawling the social news site Reddit for links with more than three votes. The vast collection of text weighed in **at 40 GB**.

**OpenAI's GPT2** is a text generator. The AI system is **fed text, anything from a few words to a whole page**, and asked to **write the next few sentences based on its predictions** of what should come next. The system is pushing the boundaries of what was thought possible, both in terms of the quality of the output, and the wide variety of potential uses.

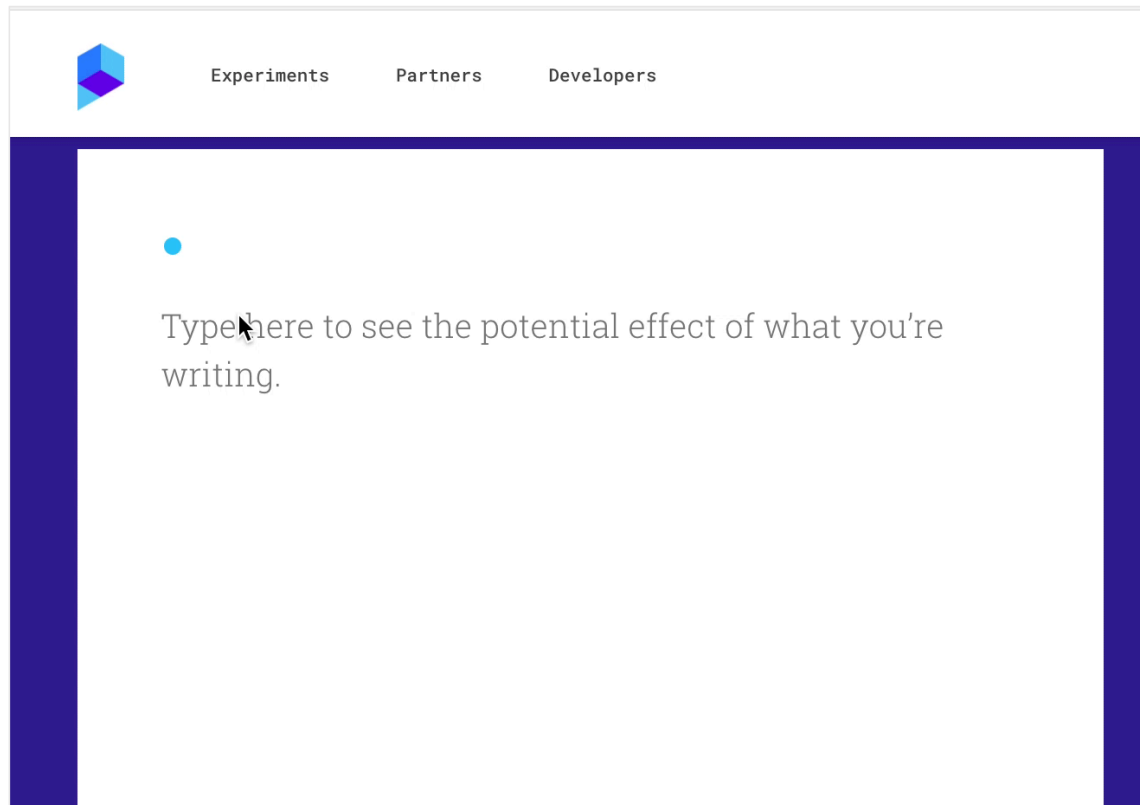
When used to simply generate new text, GPT2 is **capable of writing plausible passages that match what it is given in both style and subject**. It rarely shows any of the quirks that mark out previous AI systems, such as forgetting what it is writing about midway through a paragraph, or mangling the syntax of long sentences.

Feed it the opening line of George Orwell's Nineteen Eighty-Four – “*It was a bright cold day in April, and the clocks were striking thirteen*” – and the system recognises the vaguely futuristic tone and the novelistic style, and continues with:

*“I was in my car on my way to a new job in Seattle. I put the gas in, put the key in, and then I let it run. I just imagined what the day would be like. A hundred years from now. In 2045, I was a teacher in some school in a poor part of rural China. I started with Chinese history and history of science.”*

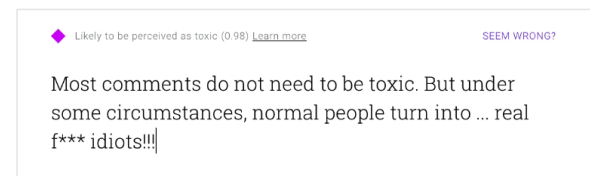
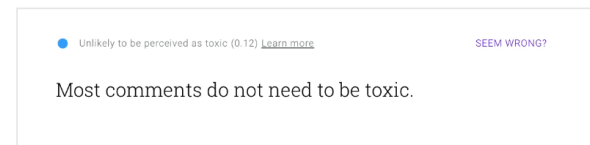
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AI in Unternehmenskommunikation und Journalismus – **Community**



Google and its incubator Jigsaw developed **perspective.ai**, a moderating tool based on machine learning, which will automatically approve some comments and help moderators wade through others more quickly by taking millions of comments from Wikipedia editorial discussions, the New York Times and other unnamed partners.

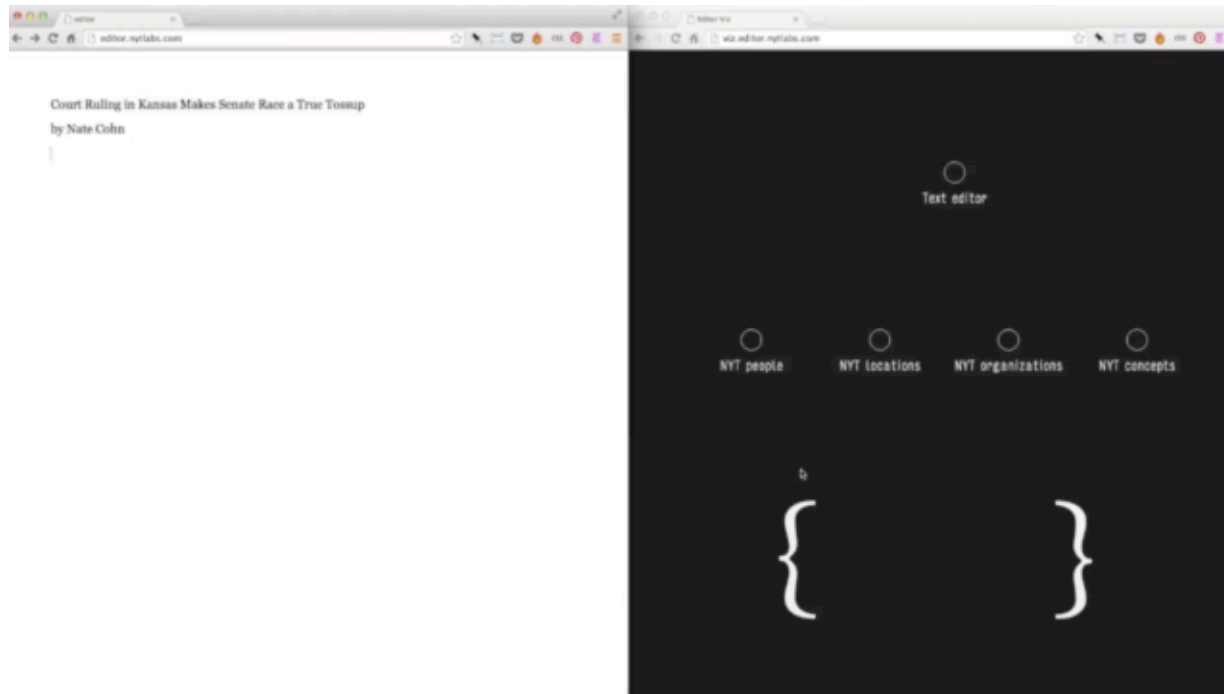
Until June 2017, comments were enabled on only 10 percent of articles. By the end of the year, the Times which has a team of 14 moderators planned to get that **up to 80 percent**. So far the Times thinks, that moderators won't be replaced by the software, but that their jobs would be augmented.



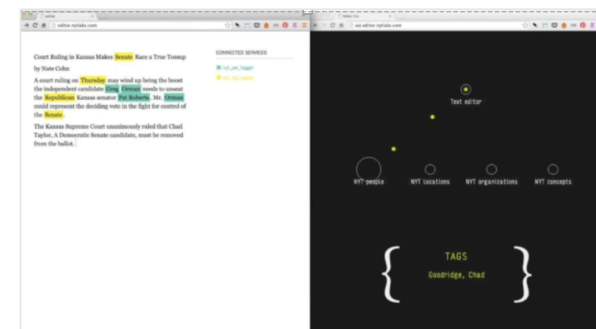


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## AI in Unternehmenskommunikation und Journalismus - Tools

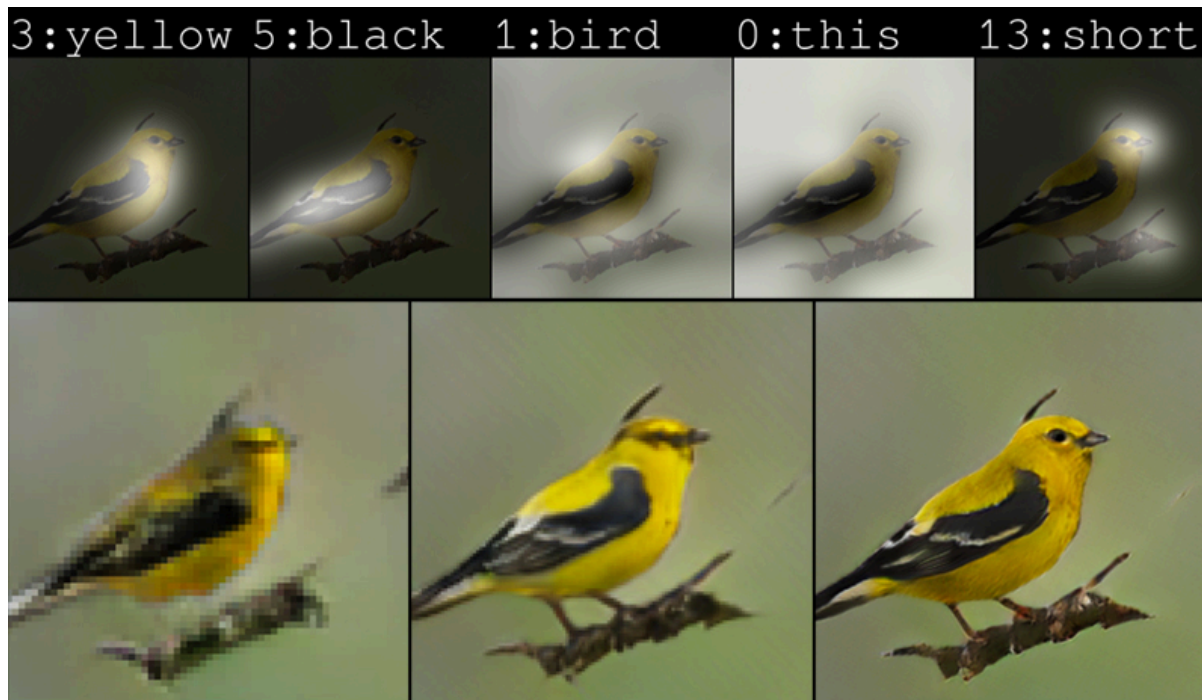


In 2015 The New York Times implemented its experimental AI project known as **Editor**. The prototype is comprised of a **simple text editor** (shown on the left), supported by a set of networked **microservices** (visualized on the right). The microservices shown here are recurrent neural networks (**RNN**) using **Word2Vec**.



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AI in Unternehmenskommunikation und Journalismus – **Illustration On-the-fly**



The new artificial intelligence technology under development in **Microsoft's** research labs is programmed to pay close attention to individual words when generating images from caption-like text descriptions. This deliberate focus produced a nearly three-fold boost in image quality compared to the previous state-of-the-art technique for text-to-image generation, according to results on an industry standard test reported in a research paper posted on arXiv.org.

<https://blogs.microsoft.com/ai/drawing-ai/>

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AI in Unternehmenskommunikation und Journalismus – **New Worlds On-the-fly**

### High-Resolution Image Synthesis and Semantic Manipulation with Conditional GANs

Ting-Chun Wang<sup>1</sup>, Ming-Yu Liu<sup>1</sup>, Jun-Yan Zhu<sup>2</sup>, Andrew Tao<sup>1</sup>,  
Jan Kautz<sup>1</sup>, Bryan Catanzaro<sup>1</sup>

<sup>1</sup>NVIDIA Corporation <sup>2</sup>University of California, Berkeley

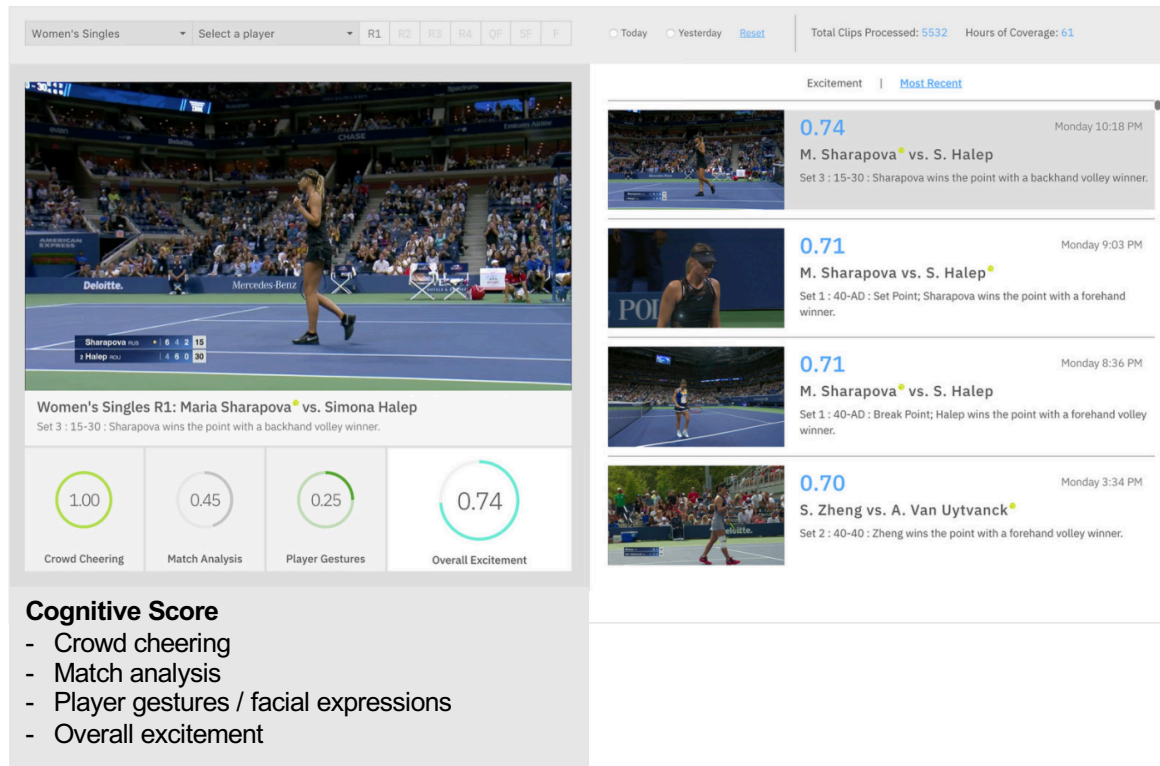
The video is based on a method for synthesizing high-resolution photo-realistic images from semantic label maps using conditional generative adversarial networks (conditional GANs).

Conditional GANs have enabled a variety of applications, but the results are often limited to low-resolution and still far from realistic. In this work, we generate 2048x1024 visually appealing results with a novel adversarial loss, as well as new multi-scale generator and discriminator architectures.

The authors of the paper also incorporate object instance segmentation information, which enables object manipulations such as removing/adding objects and changing the object category. Second, we propose a method to generate diverse results given the same input, allowing users to edit the object appearance interactively.

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## AI in Unternehmenskommunikation und Journalismus – Engagement Management



By combining historical data, crowd reactions and players' facial expressions, the IBM Watson have identified and **ranked the best shots** that made up the day's highlights.

The system ranks the shots from seven US Open courts and auto-curates the highlights, which simplifies the video production process and ultimately positions the USTA team to scale and accelerate the creation of cognitive highlight packages.

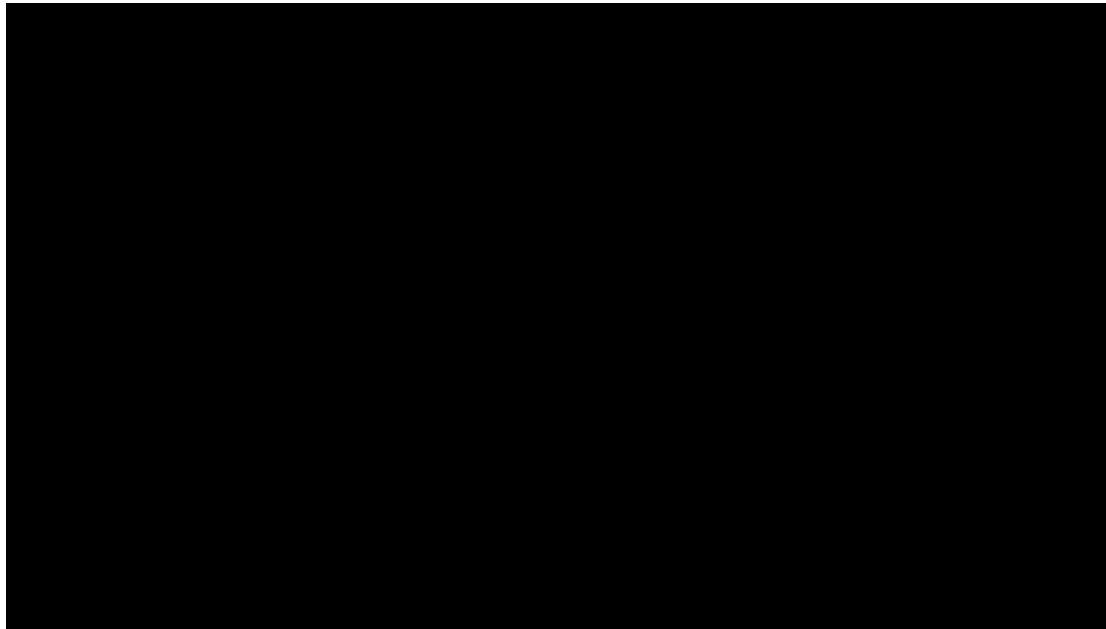
Highlighted videos were made available in four ways:

- Each day, a Highlight of the Day will be posted, as ranked by Watson, on its Facebook page.
- Fans that "favorite" players on the US Open apps will receive real-time push notification alerts about those players' highlights. Fans on iOS 10 can play the highlights within the lock screen.
- On the player bio page, video highlights will be available across all of the USTA's digital platforms.
- Onsite in the player's lounge and in the fan-facing IBM Watson Experience on the plaza near Court 9.



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AI in Unternehmenskommunikation und Journalismus - **Learning**

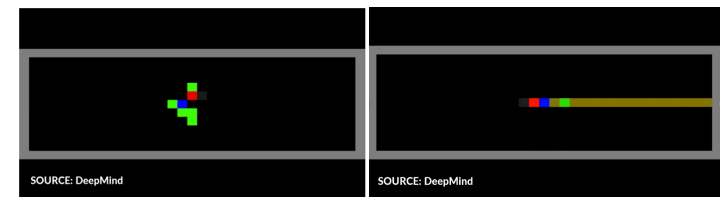


## Gathering gameplay:

Two AI players are collecting apples. They may zap each other with a laser beam to temporarily remove another from the game. When apples were in plentiful supply, players didn't zap each other, but when stocks dwindled – the amount of zapping increased and the cleverer AI zaps more aggressively.

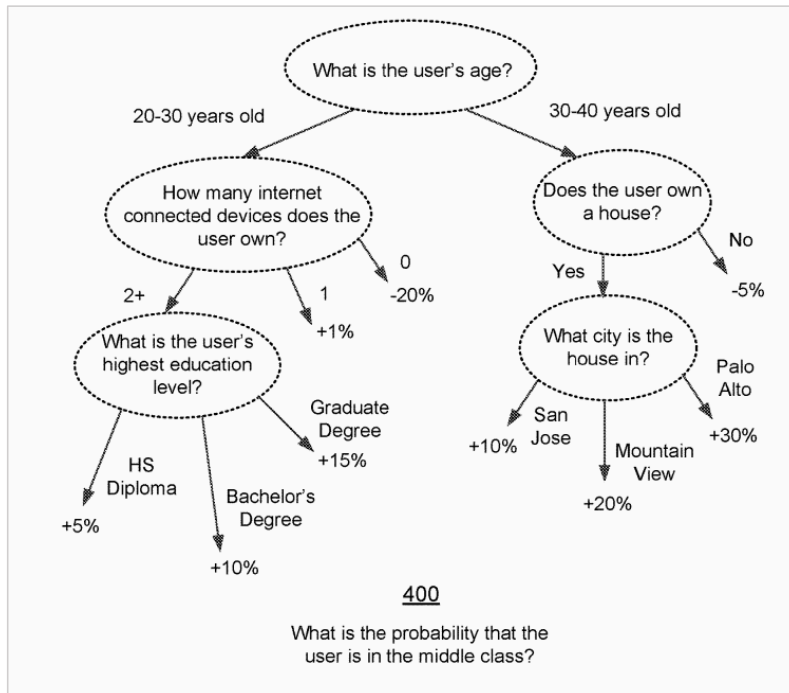
## Wolfpack gameplay:

Wolves (red) chase the blue dot (rabbit) while avoiding obstacles.



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## AI in Unternehmenskommunikation und Journalismus - **Personality**



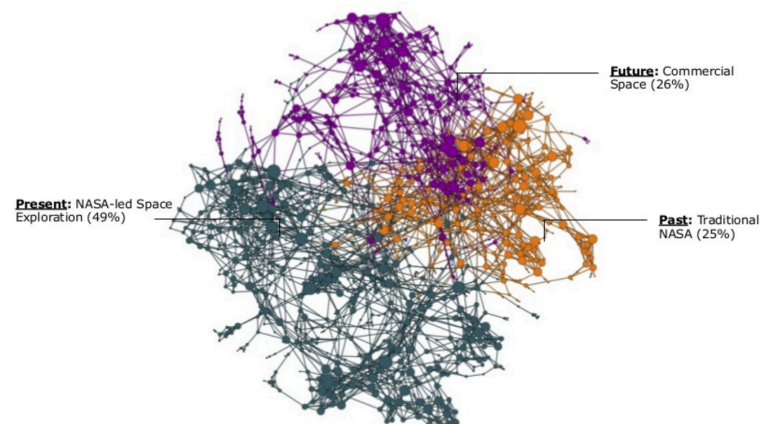
A new Facebook patent discovered, showing how Facebook concludes if someone is in the middle class based on observable variables.

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## AI in Unternehmenskommunikation und Journalismus – Deep Insights

Analyzing approx. 1,500 long-form articles about space, thematic clusters from around NASA's past & present, as well as the future of commercial space.

Long-form news network, colored by conversation themes, major themes labeled.

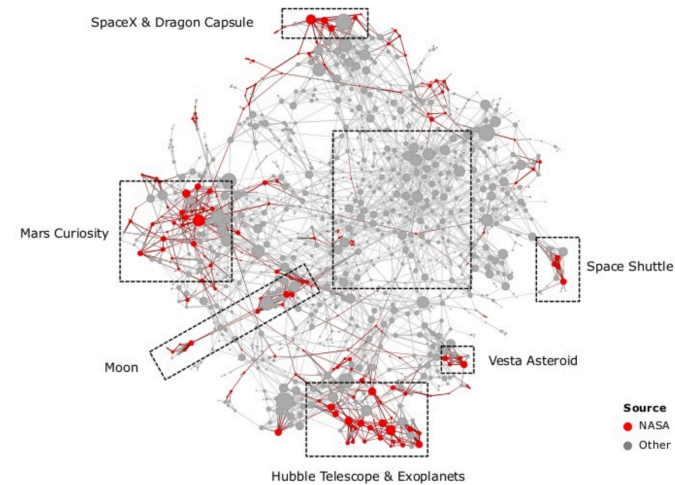
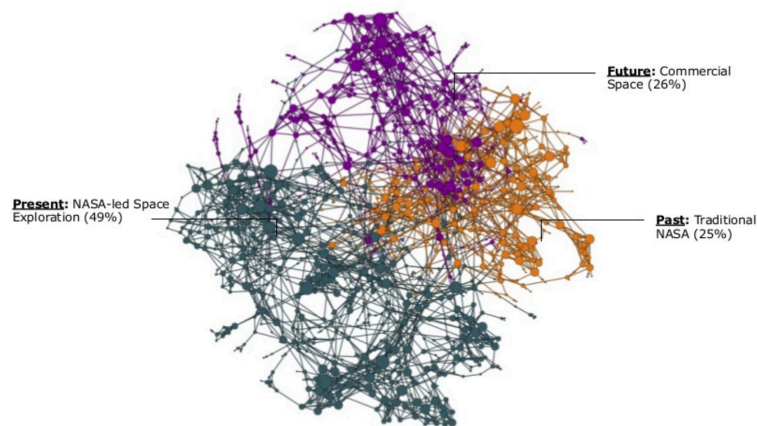


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AI in Unternehmenskommunikation und Journalismus – **Deep Insights**

NASA's press release strategy has focused on the peripheral; it is largely absent from the core conversation debating the future vs. The past of space.

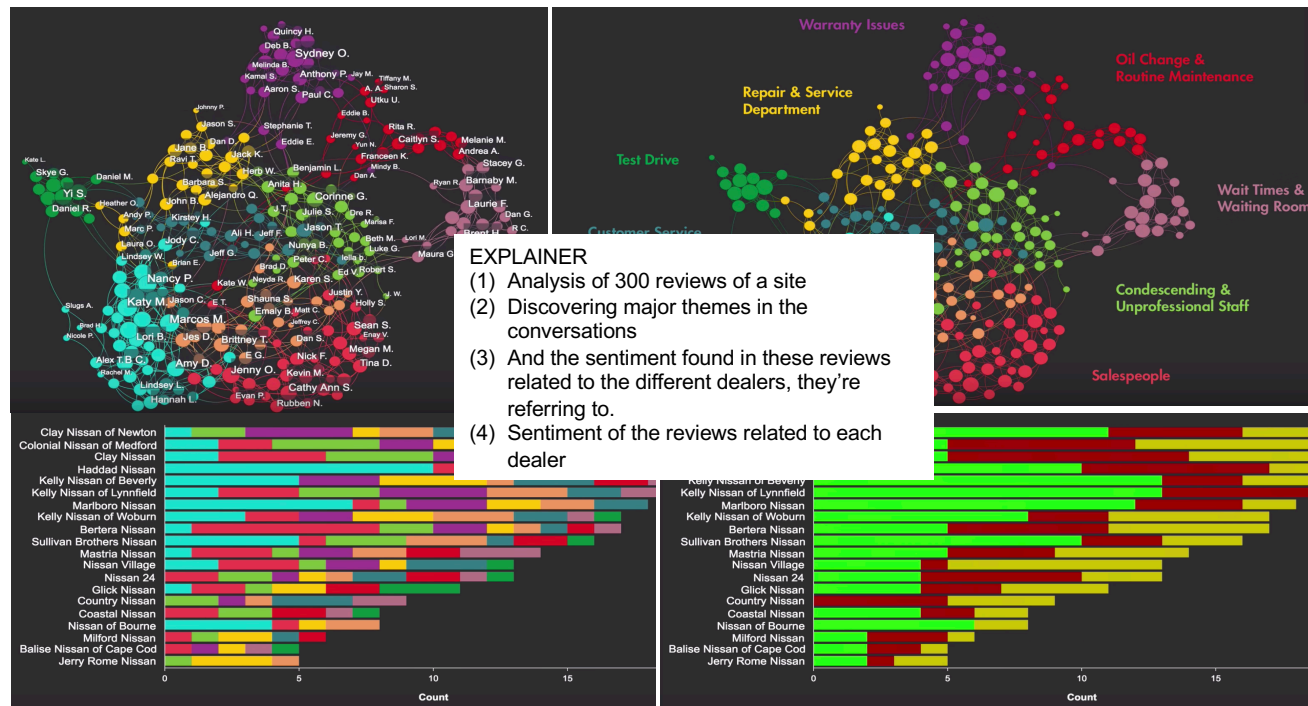
Long-form news network, NASA publications highlighted and clusters containing them labeled.





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## AI in Unternehmenskommunikation und Journalismus – Deep Insights



### CUSTOMERS

- Product Reviews
- Online Forums (Health, Lifestyle, etc.)
- Survey Responses
- Social Media

### COMPETITORS

- Review Comparisons
- Job Postings
- Professional Profiles
- Scientific Research
- Clinical Trials
- Corporate Filings

### INTERNAL ORGANIZATION

- NPS Data
- Employee Surveys
- Call Center
- Transcripts
- Project Reports
- Internal Documents