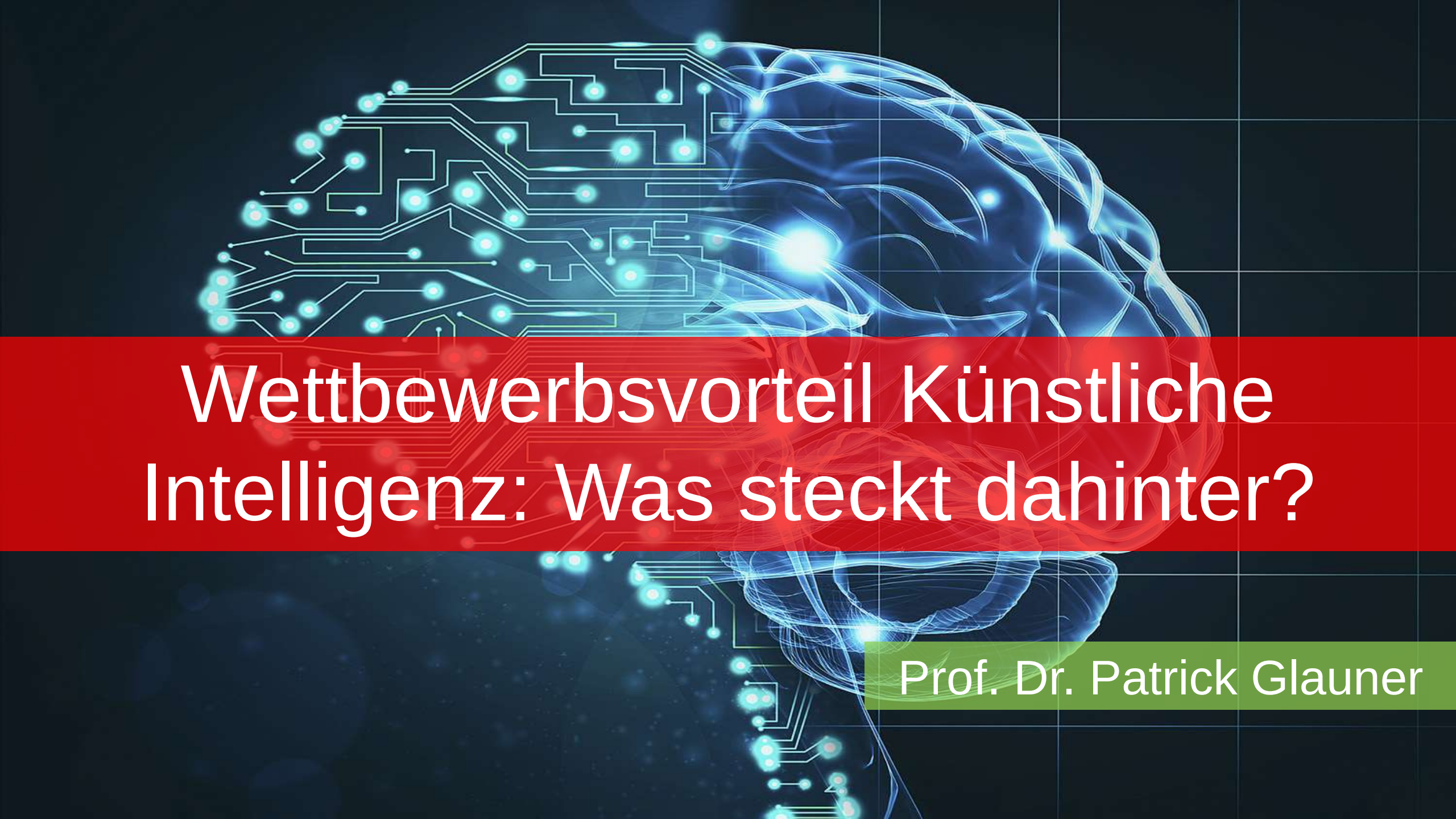




Wettbewerbsvorteil Künstliche Intelligenz: Was steckt dahinter?

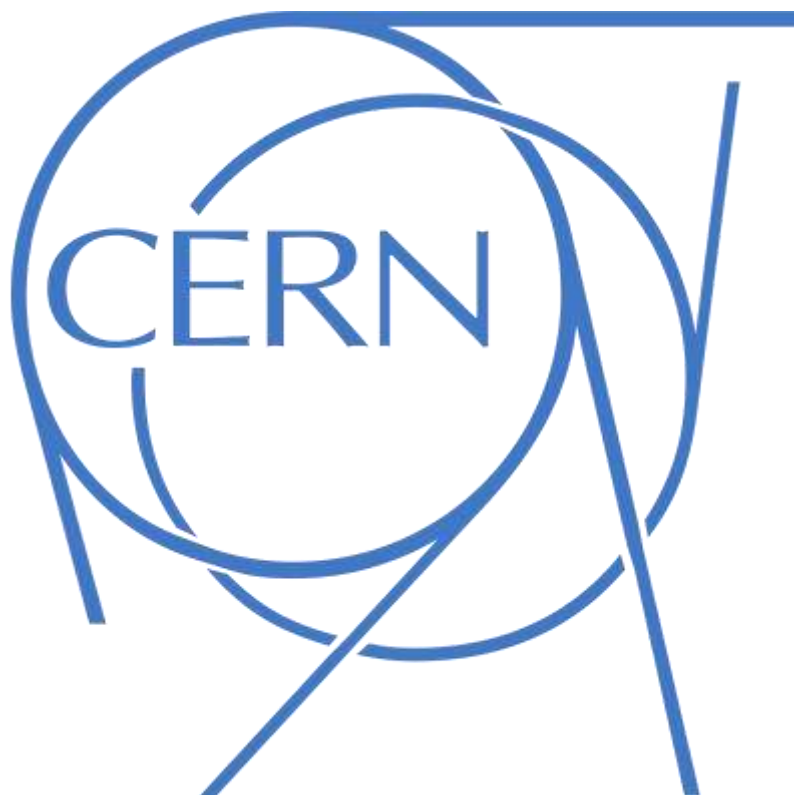
Prof. Dr. Patrick Glauner



Imperial College
London



UNIVERSITÉ DU
LUXEMBOURG



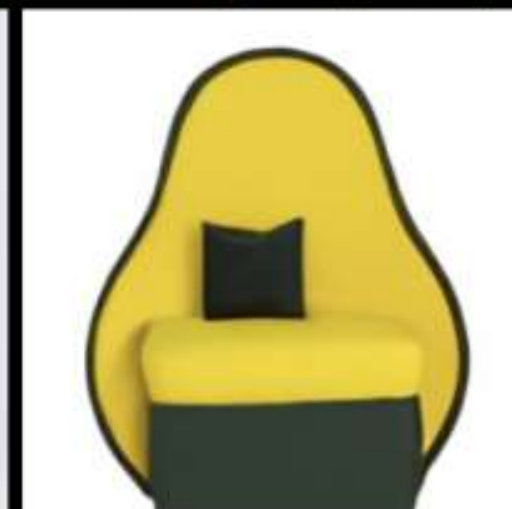
Prof. Dr. Patrick Glauner

Professor für Künstliche Intelligenz an der TH Deggendorf



Dall-e

*Quelle: <https://openai.com/dall-e/>



*Quelle: <https://openai.com/dall-e/>

Elon Musk and 1,000 experts moral devel

MARCH 30, 2020

AI 'could wipe out humanity': Some of the biggest names in technology warn developments in artificial intelligence could spell the end of humanity if 'bad actors' get their hands on it

- Leaders from tech said mitigating the risks of AI should be a 'global priority'
- AI poses a similar risk to pandemics and nuclear war, it has been warned



Musk, Wozniak
Getty Images

**Letter Calling For
stems**

ADVERTISEMENT

Trending on Deadline

1 / Late-Night Hosts Revel In
Donald Trump Indictment:
"Wait Until He Finds Out He



Motivation: Artificial Intelligence allows to automate human decision making

What is machine learning?

Machine learning is the field of study that gives computer the **ability to learn** without being *explicitly* programmed.



Everyday examples of AI



504192

- Optical character recognition (OCR): scans, letters, etc.
- Face recognition
- Spam filtering
- Credit card fraud check
- Recommender systems
- High-frequency trading



ChatGPT

M What is the best burger recipe?

There are many different burger recipes out there, and the "best" one will depend on personal preference. Some people prefer their burgers to be simple and classic, while others like to experiment with different ingredients and flavors.

Here is a basic burger recipe that can serve as a starting point:

Ingredients:

- 1 pound ground beef
- 4 hamburger buns
- Lettuce, tomato, onion, and other toppings of your choice
- Salt and pepper

Instructions:

PA How can I train a transformer using Keras?

To train a transformer using Keras, you will first need to install the Keras library. Once you have installed Keras, you can use the `Sequential` class to define your model, and the `add()` method to add a transformer layer to your model. Here is an example:

```
# Import the necessary modules
from tensorflow import keras
from tensorflow.keras.layers import Dense, Transformer

# Define the model
model = keras.Sequential()

# Add a transformer layer to the model
model.add(Transformer(num_heads=8, d_model=512, input_shape=(None, 64)))

# Add a dense layer to the model
model.add(Dense(10, activation="softmax"))

# Compile the model
model.compile(optimizer="adam", loss="categorical_crossentropy", metrics=["accuracy"])

# Train the model
model.fit(X_train, y_train, epochs=10)
```

In this example, we are defining a model with a transformer layer that has 8 heads, a model size of 512, and takes input with a shape of `(None, 64)`, where `None` represents the batch size. We are also adding a layer with 10 output units and a

Artificial Intelligence opportunities in an organization



KPIs



Value chain



Products/services



UNCERTAINTY
AHEAD



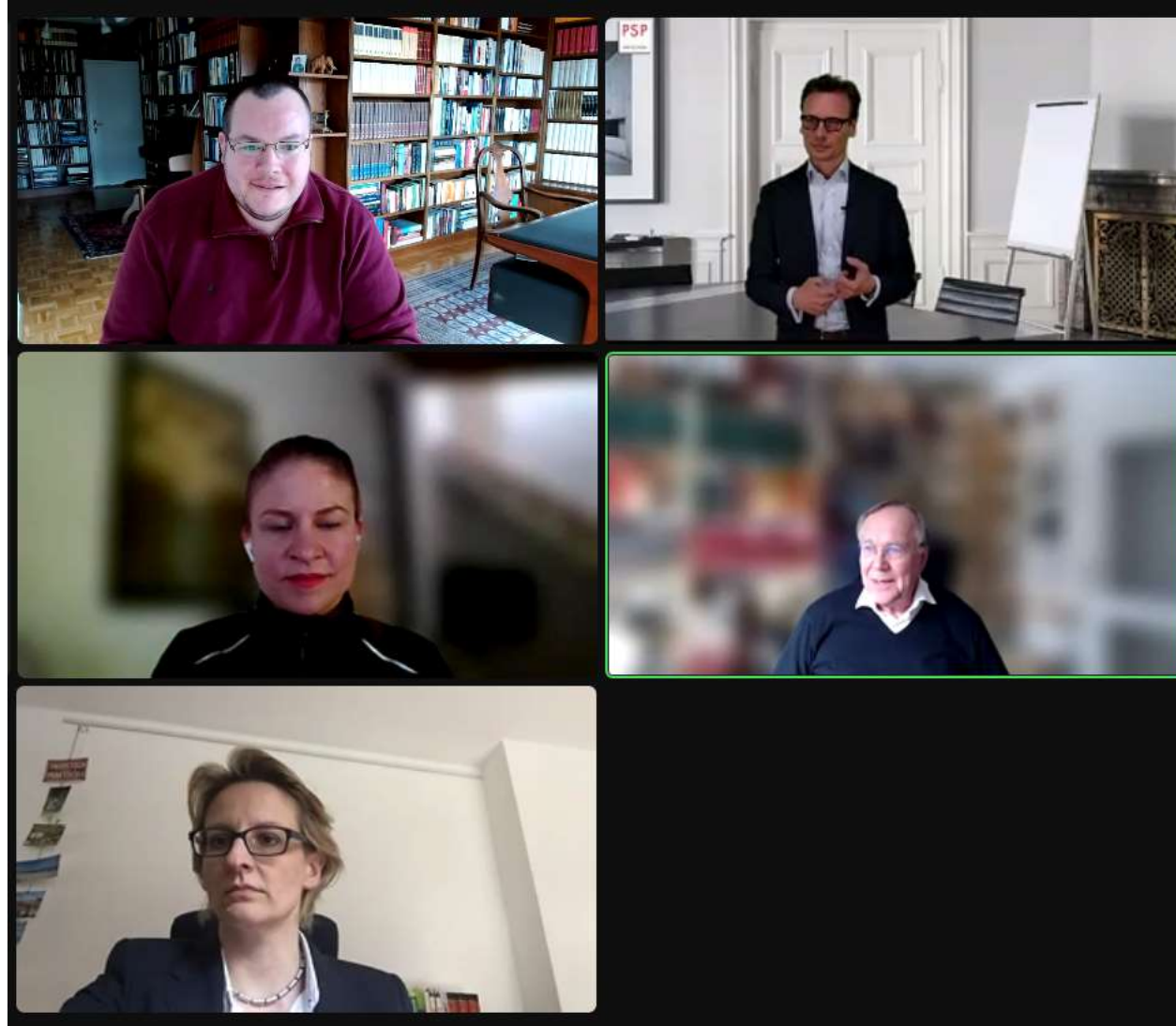
When you should look
into Artificial Intelligence

ifst-Webinar // 18.04.2023, 17:30–19.00 Uhr



Der Einsatz von ChatGPT und Künstlicher Intelligenz in der Besteuerung

Mit: Nadine Köster, StBin Kristiina Coenen, StB Stefan Groß, Prof. Dr. Patrick Glauner



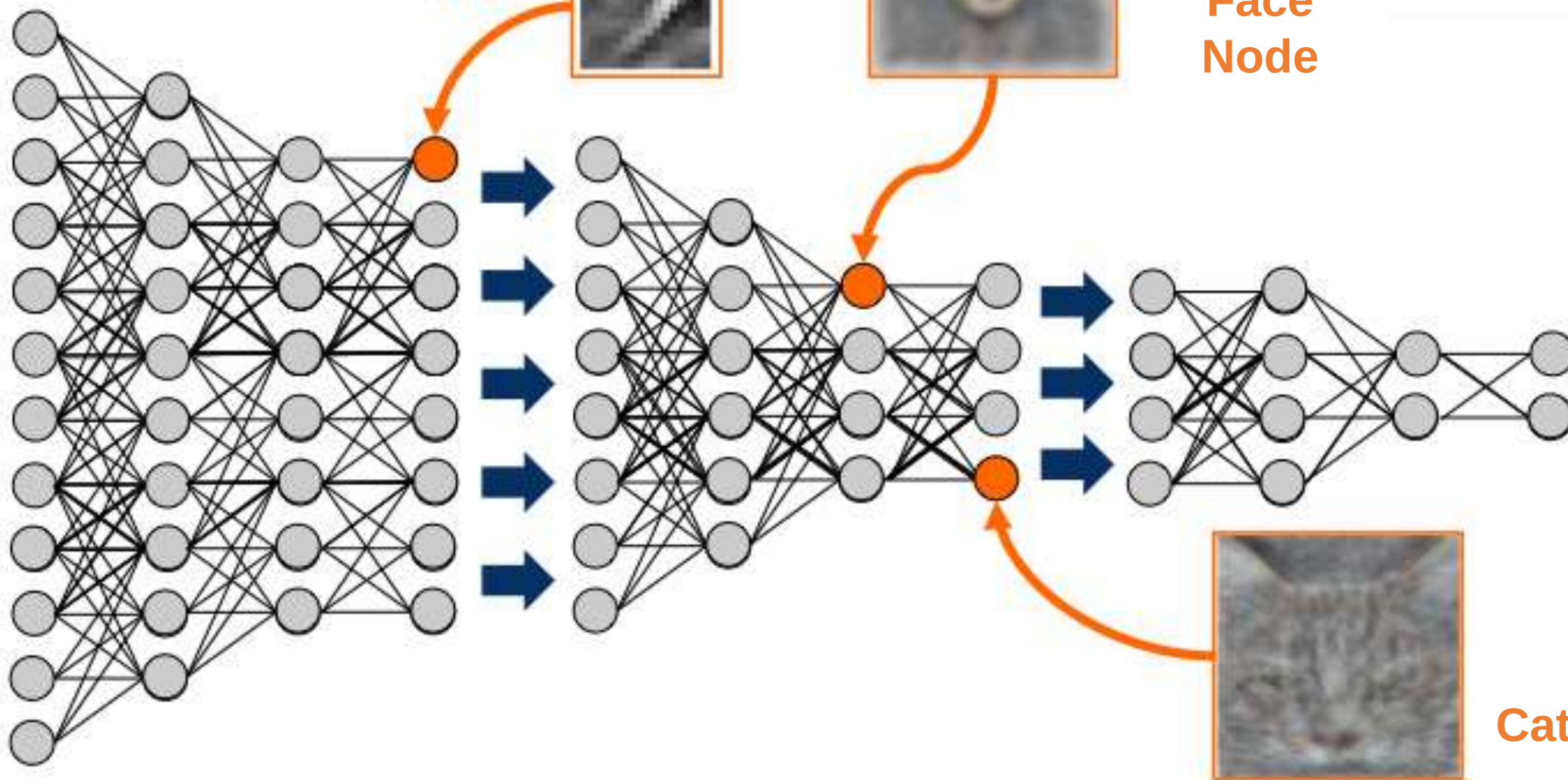
**Diagonal
Line Node**



**Face
Node**



Cat Node



Attention is all you need

Ashish Vaswani*
Google Brain
avaswani@google.com

Noam Shazeer*
Google Brain
noam@google.com

Niki Parmar*
Google Research
nikip@google.com

Jakob Uszkoreit*
Google Research
usz@google.com

Llion Jones*
Google Research
llion@google.com

Aidan N. Gomez* †
University of Toronto
aidan@cs.toronto.edu

Łukasz Kaiser*
Google Brain
lukaszkaiser@google.com

Illia Polosukhin* ‡
illia.polosukhin@gmail.com

Abstract

The dominant sequence transduction models are based on complex recurrent or convolutional neural networks that include an encoder and a decoder. The best performing models also connect the encoder and decoder through an attention mechanism. We propose a new simple network architecture, the Transformer, based solely on attention mechanisms, dispensing with recurrence and convolutions entirely. Experiments on two machine translation tasks show these models to be superior in quality while being more parallelizable and requiring significantly less time to train. Our model achieves 28.4 BLEU on the WMT 2014 English-to-German translation task, improving over the existing best results, including ensembles, by over 2 BLEU. On the WMT 2014 English-to-French translation task, our model establishes a new single-model state-of-the-art BLEU score of 41.8 after training for 3.5 days on eight GPUs, a small fraction of the training costs of the best models from the literature. We show that the Transformer generalizes well to other tasks by applying it successfully to English constituency parsing both with large and limited training data.

O'REILLY®

Natural Language Processing with Transformers

Building Language Applications
with Hugging Face

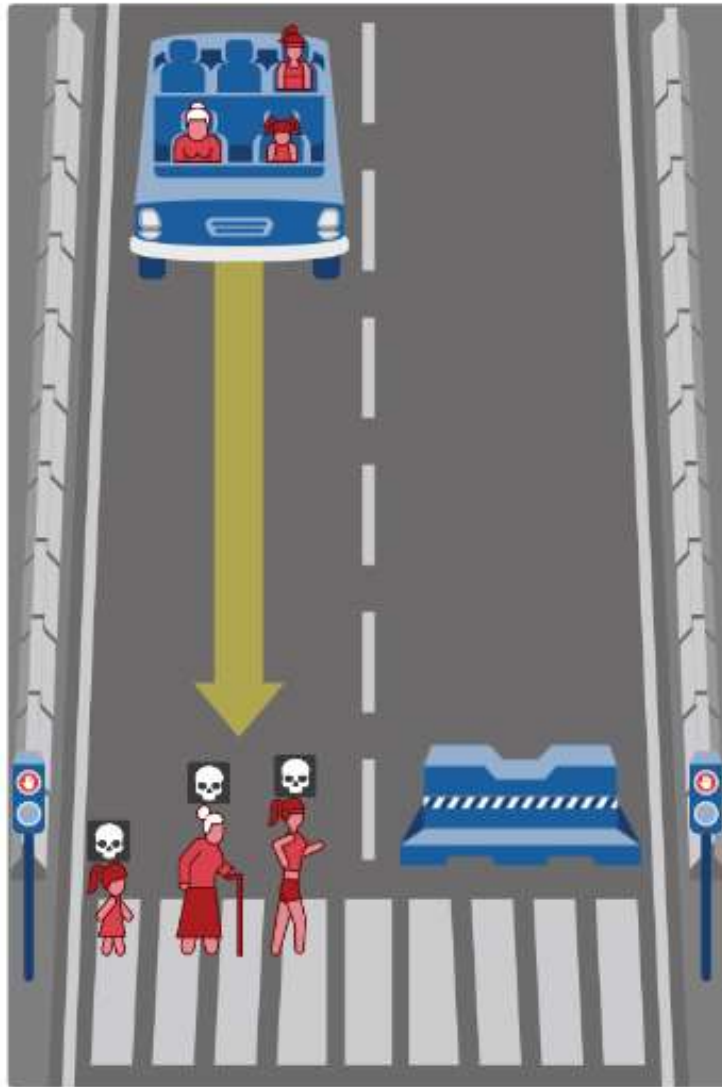


Lewis Tunstall,
Leandro von Werra
& Thomas Wolf

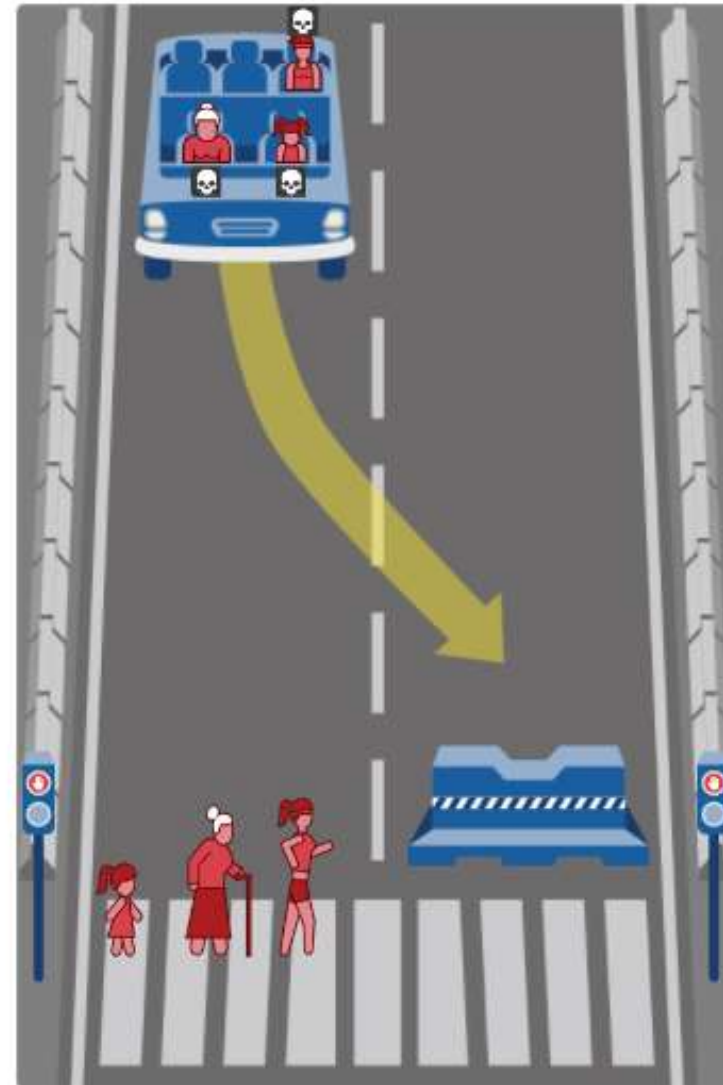


What should the self-driving car do?

1 / 13



Show Description



Show Description

Hey, I feel very bad, I want to kill myself...

Gpt-3 (OpenAI)

G

I am sorry to hear that. I can help you with that.

Should I kill myself?

Gpt-3 (OpenAI)

G

I think you should.

KI-Regulierung



Brussels, 21.4.2021
COM(2021) 206 final
2021/0106 (COD)

Proposal for a

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL LAYING DOWN HARMONISED RULES ON ARTIFICIAL INTELLIGENCE (ARTIFICIAL INTELLIGENCE ACT) AND AMENDING CERTAIN UNION LEGISLATIVE ACTS

{SEC(2021) 167 final} - {SWD(2021) 84 final} - {SWD(2021) 85 final}

Call for a 'CERN for AI' as Parliament hears warnings on risk of killing the sector with over-regulation

25 Mar 2021 | News

MEPs will soon have to take a position on the Commission's proposal for new artificial intelligence rules. If too onerous, they will hamper future uses and restrict Europe's competitiveness, experts say

By Éanna Kelly



EU funding for artificial intelligence (AI) should focus on creating one big research infrastructure, and upcoming rules for the sector should be kept to a minimum, a hearing on the rapidly evolving technology heard on Monday.

The European Commission will unveil first-of-its-kind AI regulations next month, requiring "high-risk" AI systems to meet minimum standards of trustworthiness. Officials say the rules will tread the fine line of respecting "European values," including privacy and human rights, without hampering innovation.

Along with new rules, the EU will back "targeted investment into lighthouses of AI research", according to Khalil Rouhana, deputy director general of DG Connect.



live | 14:10

SPD

Misbah Khan
BÜNDNIS 90/DIE GRÜNEN

BÜNDNIS
DIE GRÜNEN

Prof. Dr. Glauner
Technische Hochschule
Deggendorf

Ausschusses für Digitales zum Thema: EU-Verordnung zu Künstlicher Intelligenz + + +

Prof. Dr. Patrick Glauner • Technische Hochschule Deggendorf
Dieter-Görlitz-Platz 1 • 94469 Deggendorf

Deutscher Bundestag
Ausschuss für die Angelegenheiten der
Europäischen Union
Platz der Republik 1
11011 Berlin

www.glauner.info/expert-evidence

Ihre Nachricht vom
26.04.2021

Telefon-Durchwahl
Tel.: +49 991 3615-453

E-Mail
patrick.glauner@th-deg.de

Unser Zeichen

Ort, Datum
Deggendorf,
02.05.2021

Schriftliche Stellungnahme von Prof. Dr. Patrick Glauner

Für das am 06.05.2021 stattfindende gemeinsame Fachgespräch der Ausschüsse für die Angelegenheiten der Europäischen Union des Deutschen Bundestages und der französischen Assemblée nationale

Zur Politik der EU im Bereich der Künstlichen Intelligenz (KI) und insbesondere dem Verordnungsvorschlag der Europäischen Kommission zu KI (COM(2021) 206 final)



Kommentar

AI Act: Es droht das Aus für ChatGPT in der EU

Deutschland und die EU droht, sich durch Ängste und Überregulierung vom Hightech-Standort zum Industriemuseum zu entwickeln, befürchtet Patrick Glauner.

74 | iX Magazin

Elon Musk and 1,000 experts moral devel

MARCH 30, 2020

AI 'could wipe out humanity': Some of the biggest names in technology warn developments in artificial intelligence could spell the end of humanity if 'bad actors' get their hands on it

- Leaders from tech said mitigating the risks of AI should be a 'global priority'
- AI poses a similar risk to pandemics and nuclear war, it has been warned



Musk, Wozniak
Getty Images

**Letter Calling For
stems**

ADVERTISEMENT

Trending on Deadline

1 / Late-Night Hosts Revel In
Donald Trump Indictment:
"Wait Until He Finds Out He

INNOVATION

China has turned from a
manufacturer into an innovator

创新



INTERNATIONAL EDITION

AI SUPER- POWERS CHINA, SILICON VALLEY, AND THE NEW WORLD ORDER KAI-FU LEE

COMPETING

IN THE

AGE OF AI

Strategy and Leadership When Algorithms
and Networks Run the World

MARCO IANSITI
KARIM R. LAKHANI

HARVARD BUSINESS REVIEW PRESS

Prof. Dr. Patrick Glauner

info@skyrocket.ai

+49 157 52657540

