

Ai & ChatGPT

Netværksmøde for studievejledere fra erhvervakademierne.

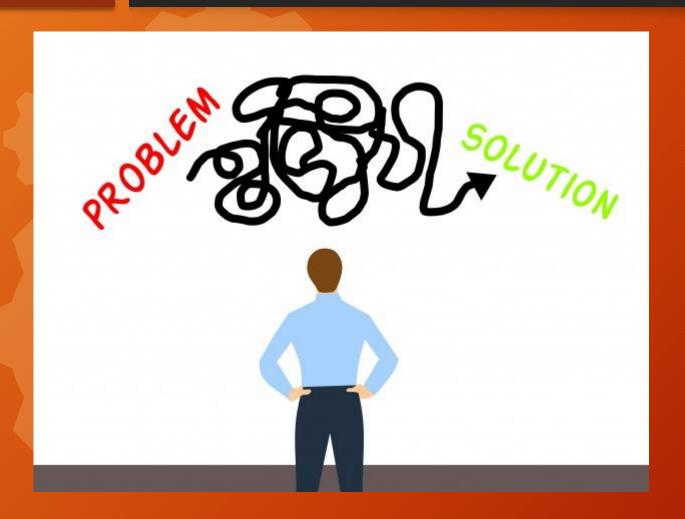
23 Maj 2023.

Simon Laub, sila@eaaa.dk

Al & Chatbots.

Problems. Solutions...

Is there room for "Presence", "Curiosity", "Courage", "Resilience", "Ethics" & "Personal leadership" in the new world of ChatBots & AI?



Al & ChatBots.

- Problems... Where are we now?

(So far, in pictures, by Bing AI, Dall.E.)

- Next step: Avoiding negatives.
- Still better: Working actively on creating positives.



Following the introduction of NLP transformers in 2017 (Vaswani et al., 2017), they now appear to be ubiquitous in contemporary technology. BERT (Devlin et al., 2018) helps Google improve contextual understanding of unlabeled text across a broad range of tasks, and the company OpenAI (OpenAI, 2023) creates transformer based chatbot products (Adamopoulou and Moussiades, 2020) that clearly illustrate the possibilities of these models.

Transformer-based semantic textual similarity solutions have been proposed for tasks ranging from "technological trouble shooting" (Alfeo et al., 2021) to healthcare, "Clinical Sentence Pairs" (Ormerod et al., 2021) and more.

Following this development, we expect that NLP transformers can monitor demanded competences on the Danish labor market using ongoing automated analysis of online job ads. This hypothesis is the foundation of this study, which verifies the possibility of using NLP transformers for semantic analysis of demanded competences in Danish job ads.

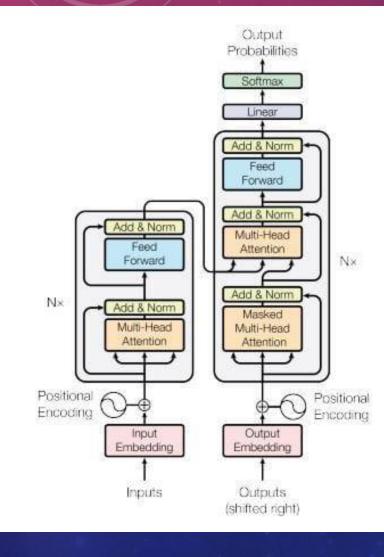
Project: JobTrend. STAR/Eaaa.
Morten, Jacob & Simon (sila@Eaaa.dk).
Matching skills with jobs. Spring 2023.

NLP Transformers.

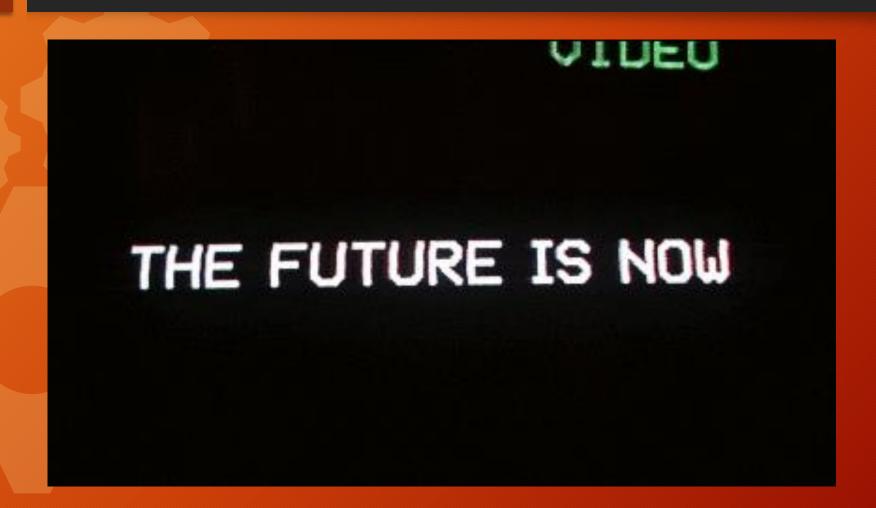
"Attention is all you need", 2017. Article.

Background.

Neural nets & Transformers.



Is there room for "Presence", "Curiosity", "Courage", "Resilience", "Ethics" & "Personal leadership" in the new world of ChatBots & AI?

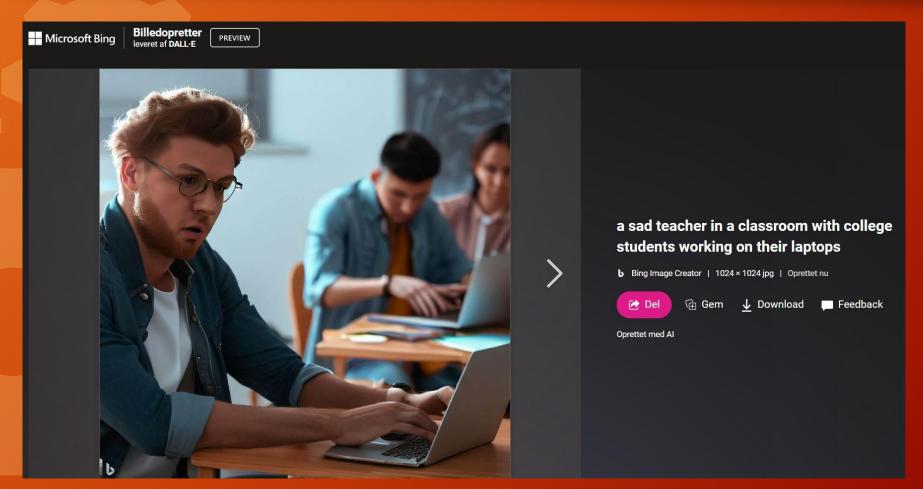


Studievejledernes netværksmøde. sila@eaaa.dk Sila. 23 Maj 2023.

- Where are we now? The story so far, according to Dall. E, Bing.



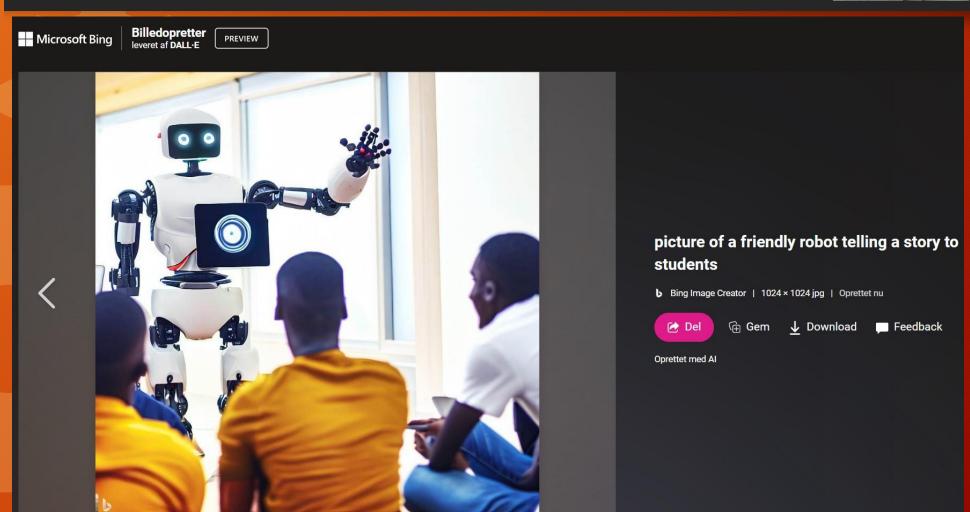
Towards the future. Problems and no clear path forward...? Information overload 2023...



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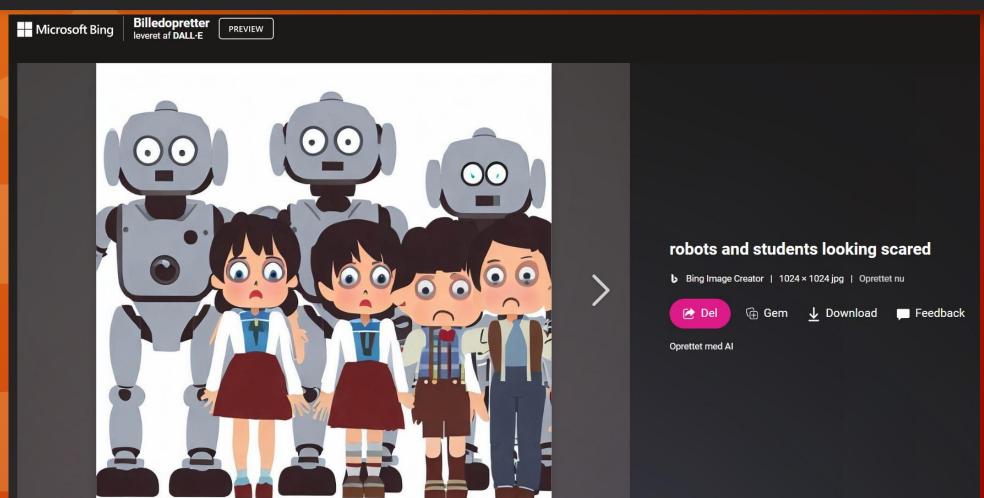
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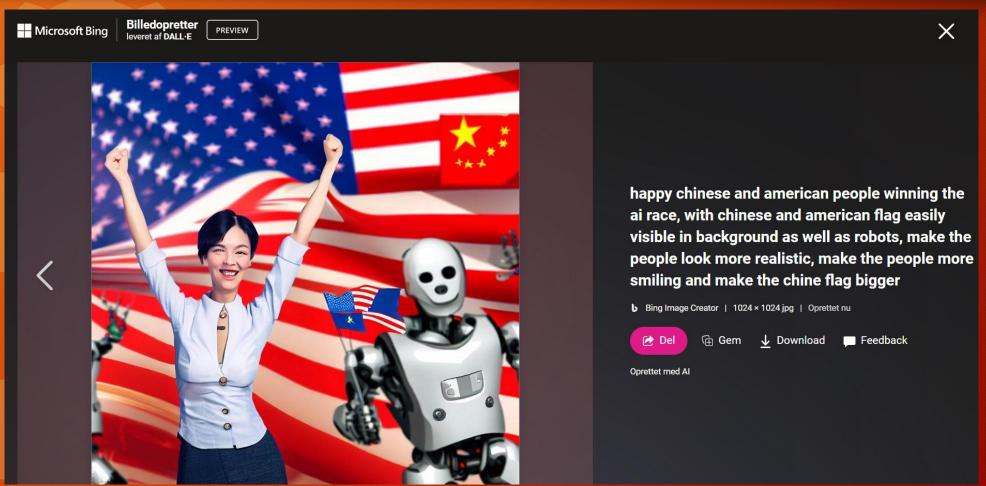
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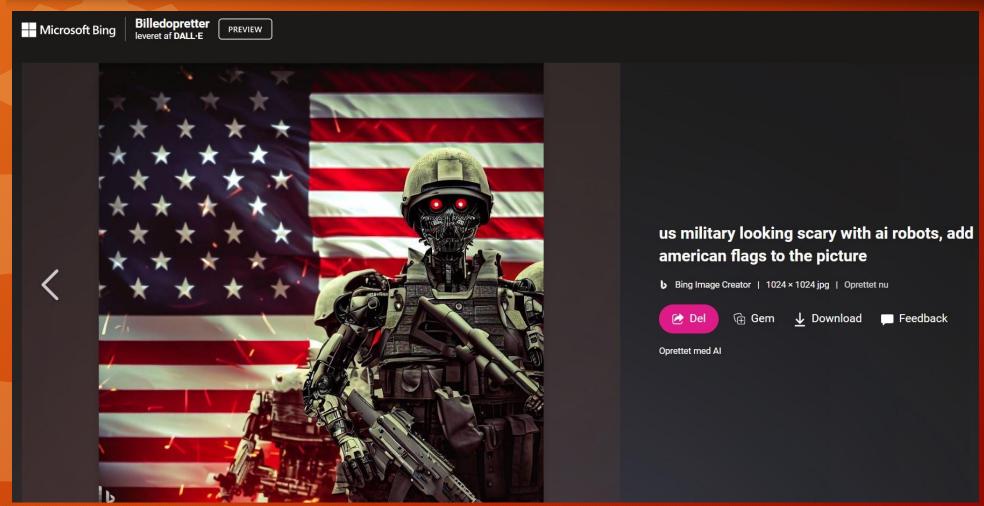
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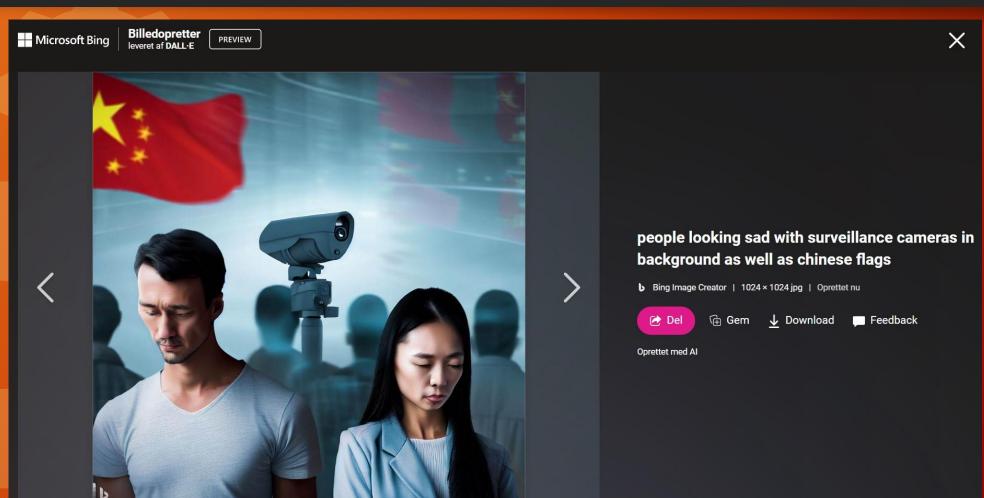
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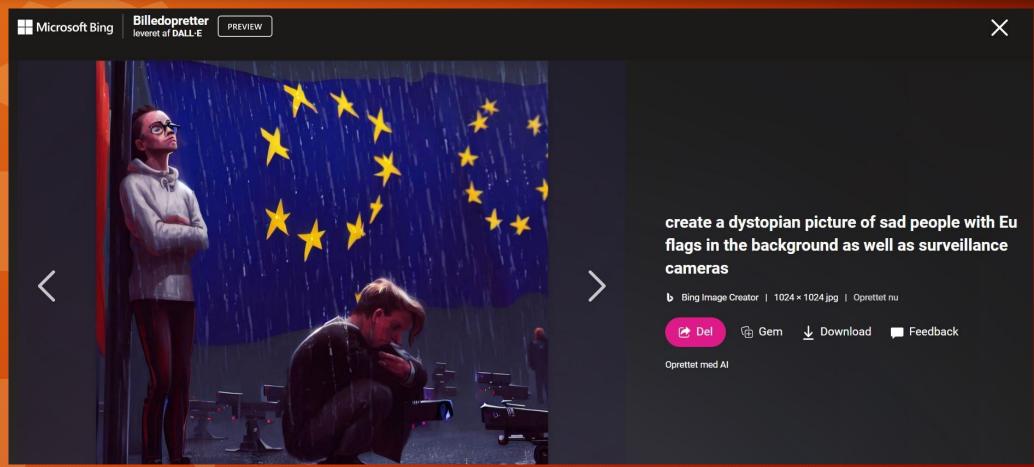
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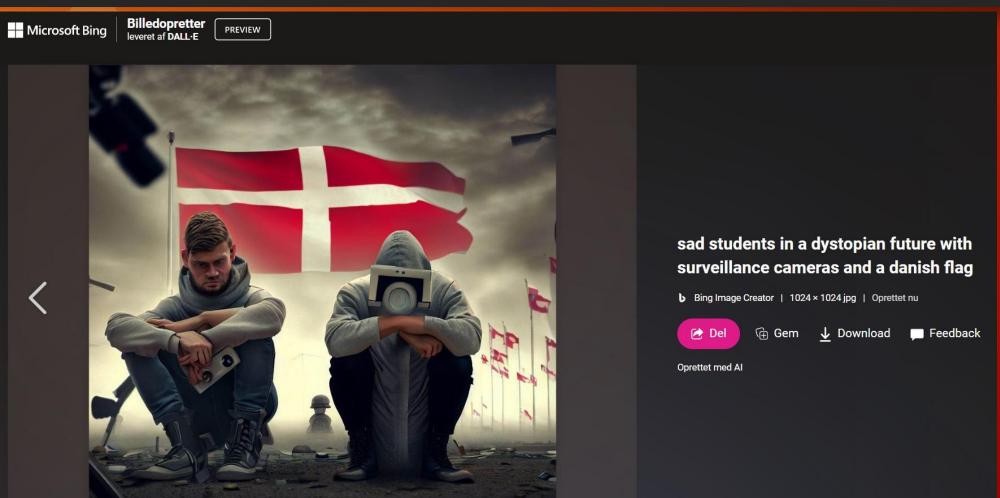
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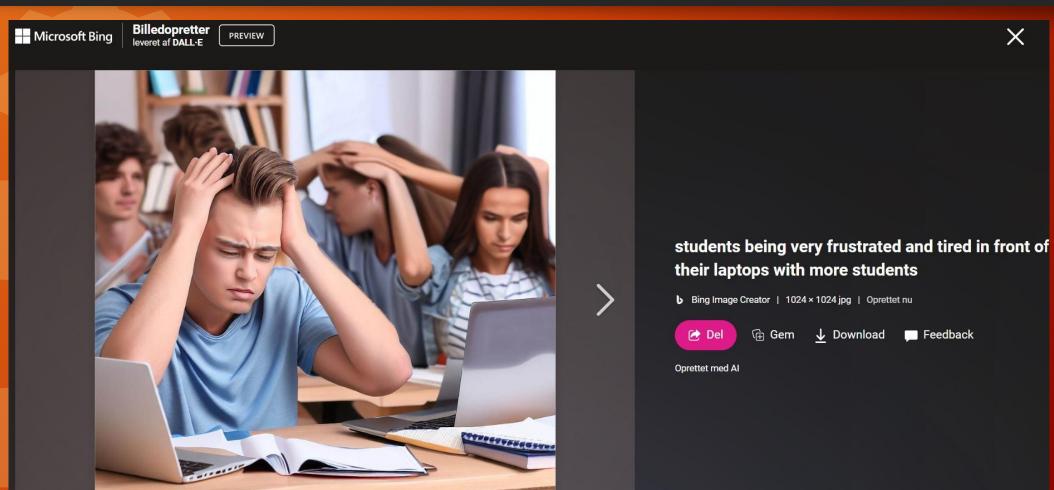
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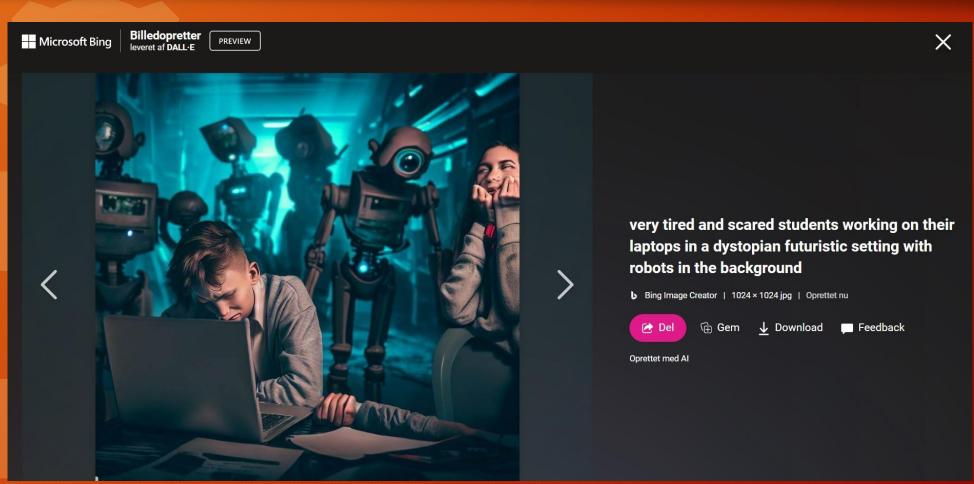
Towards the future. Problems and no clear path forward...? Information overload 2023...



- Where are we now? The story so far, according to Dall.E, Bing.



Towards the future. Problems and no clear path forward...? Information overload 2023...



chatGPT search: Ban presence, curiosity, ethics, resiliance and personal leadership in classroom and replace with TikTok teachers.

create a dystopian classroom where Presence, curiosity, courage, ethics, resilience and personal leadership are all banned and replaced with TIKTok teacher

Here is a possible dystopian classroom scenario:

The bell rings and the students shuffle into their seats. They wear identical uniforms and masks that cover their faces. They do not talk to each other or look around. They stare at the large screen in front of the room, where a TIKTok teacher appears.

"Good morning, class. Today we will learn about the benefits of conformity and obedience. Please repeat after me: I am grateful for the system that provides me with everything I need. I do not question the system or its rules. I do not express any emotions or opinions that are not approved by the system. I do not have any hobbies or interests that are not related to the system. I do not have any friends or family that are not loyal to the system."

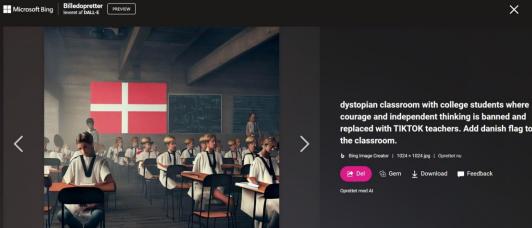
The students repeat the words in a monotone voice, without any sign of presence, curiosity, courage, ethics, resilience or personal leadership. They do not think for themselves or challenge anything they hear. They only follow the instructions of the TIKTok teacher, who rewards them with likes and comments for their compliance.

The TIKTok teacher continues to show them videos of celebrities and influencers who endorse the system and its products. The students are told to mimic their gestures and phrases, and to buy their merchandise. The TIKTok teacher also shows them videos of dissidents and rebels who oppose the system and its values. The students are told to boo and mock them, and to report any signs of resistance they see.

The TIKTok teacher tells them that this is the only way to be happy and successful in life. The students believe it and do not dare to imagine anything else. They spend their days watching and repeating what they see on the screen, without any creativity or originality. They are content with their dull and meaningless existence, unaware of the possibilities they have lost.



Image created with Microsoft Bing. DALL.E. Sila. 14 Maj 2023. Towards the future. Problems and no clear path forward...? Information overload 2023...



Al in the media.

The train to the future leaves, and Danish students are left behind, looking sad.

Al & Chatbots. Problems, and how they go away. A fairy tale.

- Where are we now? The story so far, according to Dall.E, Bing.

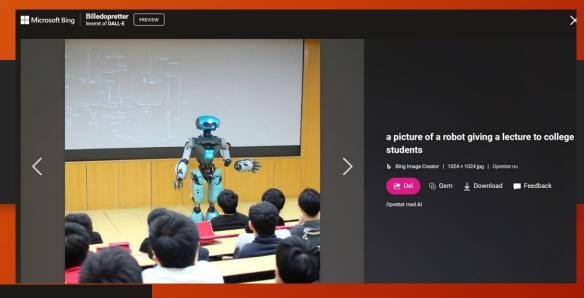
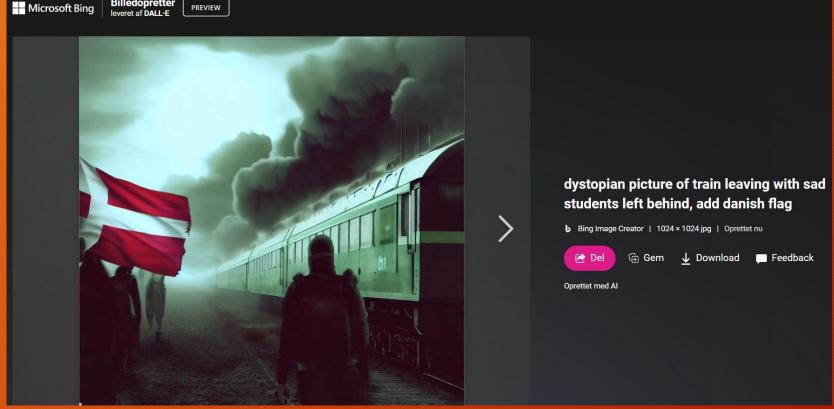


Image created with Microsoft Bing. DALL.E. Sila. 14 Maj 2023.



Towards the future. Problems and no clear path forward...? Information overload 2023...

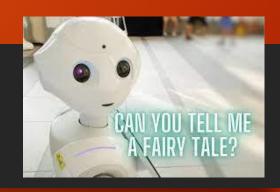


Al in the media.

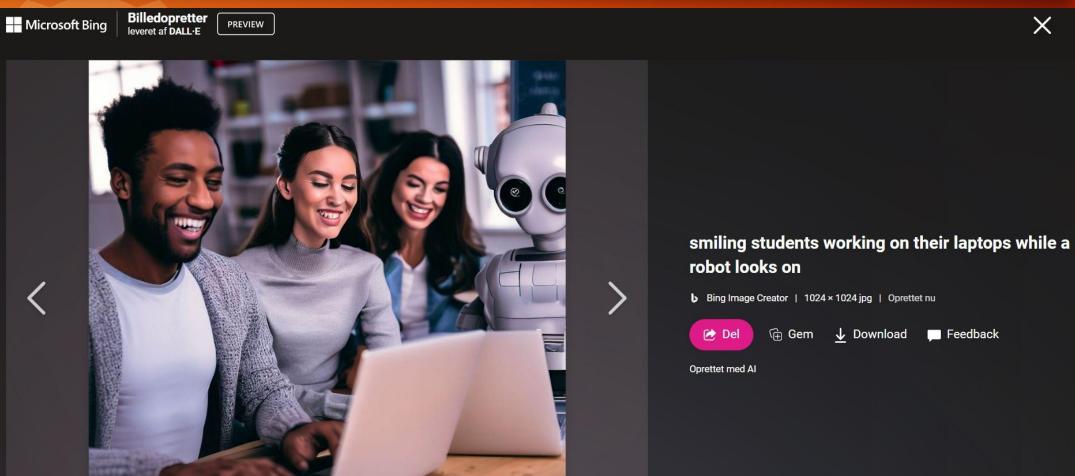
Despite having no plan for the future, and taking no action, everything ends really well in Denmark.

Al & Chatbots.

- Where are we now? The story so far, according to Dall.E, Bing.



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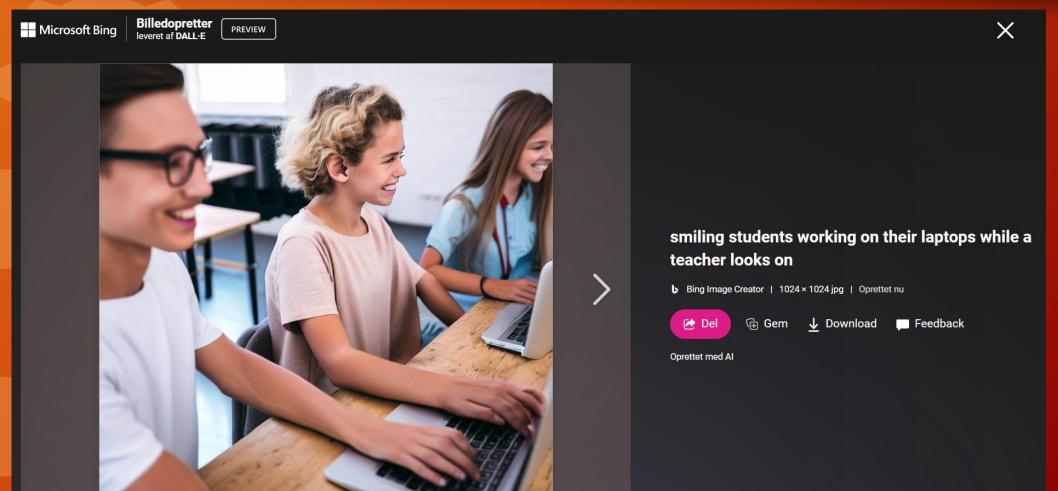
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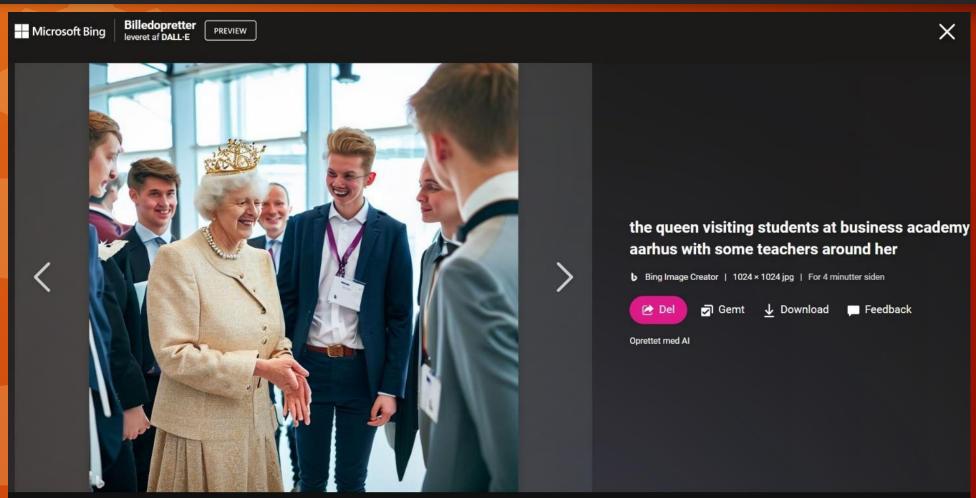
The queen visits Business Academy Aarhus and gives everyone medals for the good job everyone has been doing.

Al & Chatbots.

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Towards the future. Problems and no clear path forward...? Information overload 2023...



Reality 2023....

Classification problems.

Ex 2. Healthcare.

Diseases identification and diagnosis.

Diseases prediction.

Medical imaging.

AI/ML can be really helpful.

Which is why we are talking about AI/MI...

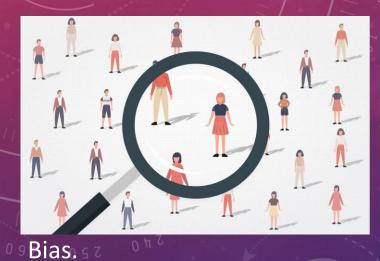


ML/Al assistance

Some very real problems...

ML/Al assistance

Classification problems. Ex 3. Prison sentences?



Al is sending people to prison and getting it wrong.



https://www.technologyreview.com/2019/01/21/137783/algorithms-criminal-justice-ai/



The philosopher Shannon Vallor, University of Edinburgh, argues that there are many garbage/zombie systems out there.

That they keep coming, and that we should all work together to push them back:

Problematic systems:

- Social ethical implications not carefully considered.
- Bias in training data not considered.
- The AI doesn't respect privacy.

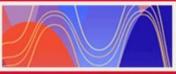
 (And gains access to things like sexual orientation. emotional status, intentions, personality traits).
- The method the AI is using is based on un-scientific/ doubtful methods.



The philosopher Shannon Vallor, University of Edinburgh, argues that there are many garbage/zombie systems out there.

That they keep coming, and that we should all work together to push them back - i.e. unproven/pseudoscience "Facial features" doesn't give human character".

> nature communications



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Home > Multimedia Tools and Applications > Article

Published: 02 March 2022

RETRACTED ARTICLE: Human character identification using facial features and optimised deep convolutional neural network

Srinivas Adapa ≥ & Vamsidhar Enireddy



The philosopher Shannon Vallor, University of Edinburgh, argues that there are many garbage/zombie systems out there.

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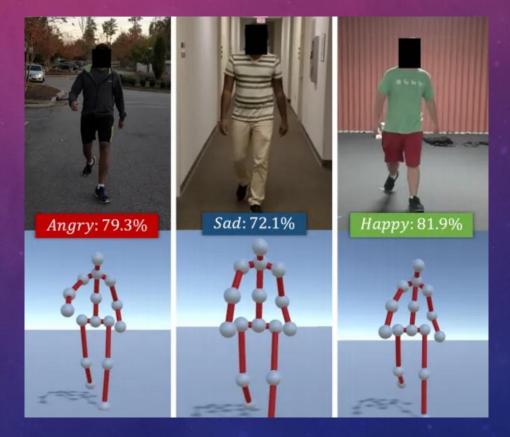
Journal of Big Data 7, Article number: 2 (2020) Cite this article

15k Accesses 12 Citations 98 Altmetric Metrics



The philosopher Shannon Vallor, University of Edinburgh, argues that there are many garbage/zombie systems out there.

Ai identifies emotion based on your walking. Even if that is possible, is that then something we want to see in our local shopping mall?



https://philsiarri.medium.com/ai-identifies-human-emotion-based-on-walking-style-bef158b50e79

What about truth? In the age of chatGPT and similar bots.

Truth in the age of chatGPT?

A fake news frenzy: why ChatGPT could be disastrous for truth in journalism

For the purposes of journalism, they can create vast amounts of material - words, pictures, sounds and videos - very quickly. The problem is, they have absolutely no commitment to the truth. Just think how rapidly a ChatGPT user could flood the internet with fake news stories that appear to have been written by humans.

https://www.theguardian.com/commentisfree/2023/mar/03/fake-news-chatgpt-truth-journalism-disinformation

Zombie Al



A really big problem: The value alignment problem.

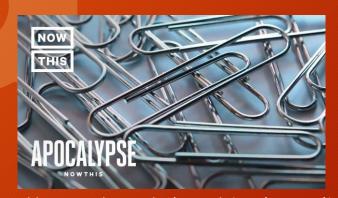
Optimization for just 1 parameter. E.g. Profit or Control.

Compare with "optimization" in education where we want to optimize for "Presence", "Curiosity", "Courage", "Resilience", "Ethics" & "Personal leadership".



Consequences of Misaligned Al Simon Zhuang, Dylan Hadfield-Menell https://arxiv.org/abs/2102.03896





The value alignment problem in Al: Look at a common situation, where the user's true goals are only expressed to an Al system through proxies. This initially leads to positive utility. But decreases to negative utility over time as the Al system overoptimizes for the proxy objective.

https://generallyintelligent.com/podca st/2021-05-11-podcast-episode-10dylan-hadfield-menell/

https://cepr.org/voxeu/columns/ai-and-paperclip-problem

chatGPT in the classroom. Initial comments.

Optimizing for learning? What?

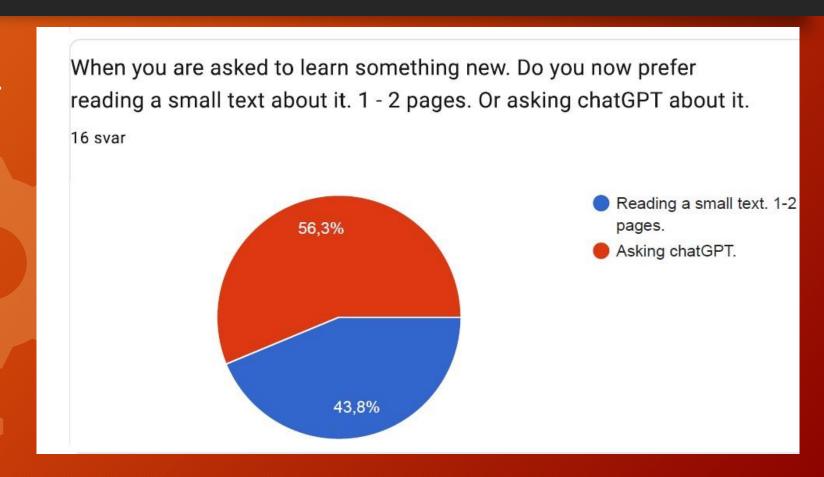
Students working with chatGPT prompt engineering at Eaaa. Survey, April 2023.

Everyone wants to work with chatGPT.
Well, because: Faster, higher productivity...
Survey in Eaaa class, April 2023.

Det tager lang tid at lave gode prompts. Er det en god måde at arbejde på?

Hvad foretrækkes.

- At læse en kort tekst på papir eller at arbejde med chatGPT?
- Er et mix det bedste?
- Hvis man er ordblind kan det være et hård arbejde at arbejde meget med prompt engineering.



Optimizing for learning? What?

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will perfer that.

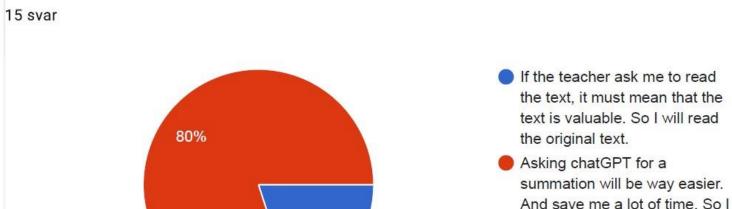
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Imagine that the teacher gives you an assignment to read 50 pages, that include graphs, and some pages with technical text, that it will take you some time to read. Then imagine that ChatGPT can give you a summation of this text.

20%



Optimizing for learning? What?

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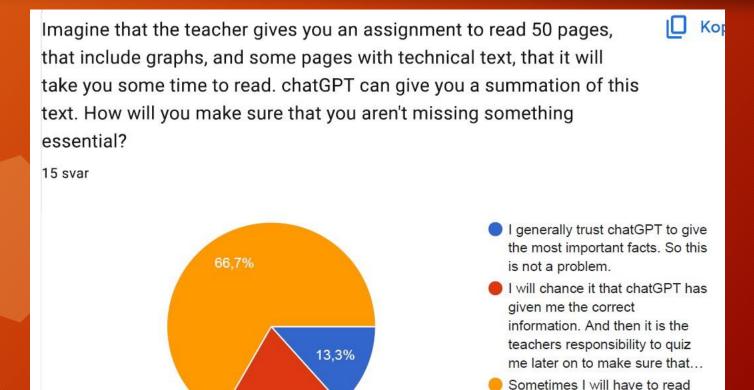
the full texts. In order to

understand the material fully.

Det tager lang tid at lave gode prompts. Er det en god måde at arbejde på?

Hvad foretrækkes.

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20%

Plan for the future... In the 70's the BBC made a documentary, 1978's "Now The Chips Are Down". https://en.wikipedia.org/wiki/Now_the_Chips_Are_Down

In the late 1970s, the microprocessor stopped being a quirky outlier of a computing industry that was largely isolated from everyday experiences. Instead, people realized that microprocessors were going to infiltrate everywhere and change lives across the board - especially jobs.

https://www.theregister.com/2023/05/15/will_llms_take_your_job/

Better: Working actively on creating positives.

The BBC made a documentary, 1978's "Now The Chips Are Down", as part of its well-established Horizon series. The ending was unusually forceful: "What is shocking is the government has been totally unaware... the silence is terrifying. It's time to talk about the future."

This hit home. Three years later, the UK government kicked of the Microelectronics Education Programme (MEP) and backed the BBC's Computer Literacy Project.

Plan for the future...
Will LLM take you job? Only if you allow it...?

Today: Unlikely that governments and public service broadcasters of 2023 will find common cause this time to create even the skeleton of an education and awareness campaign.

Better:
Working actively on creating positives.

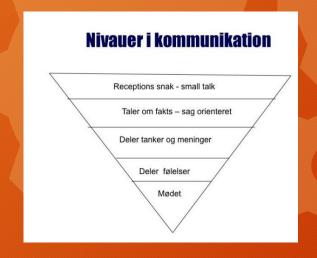
Encourage those in work that may be affected to find what each new iteration is good at and bad at for their particular specialties. This has three facets:

- a) Yes, LLMs may be good for you and you should know how.
- b) No, LLMs can't work without expert human interaction
- c) And for your job you are probably the best expert human. Still...

https://www.theregister.com/2023/05/15/will_llms_take_your_job/

It is easier just to say no, and let others decide the future. But is this what we want? Talk about it ... Lost art of communication... What do you think?

- Uenighed skal have plads og samtalen skal være ligeværdig
- Tydelighed er vigtig
- Vrede, irritation, frygt kommer i vejen for "Den gode dialog"



Better: Working actively on creating positives. Tilfældigt opslag vedr. "god kommunikation".

Lyt til svaret i stedet for at tænke over hvad du selv vil sige.

- -Hvad (mener du når du siger...)
- -Hvornår (har du det sådan...)
- -Hvem (synes du også kunne)
- -Hvorfor (synes du at ...)
- -Undlad at kritisere personligt
- -Undlad at komme med gode råd før du bliver spurgt.

It is easier just to say no, and let others decide the future. But is this what we want? Talk about it ... The past and the way forward. What we want to keep.

Det levende ord:

I eftertiden er den grundtvigianske pædagogik bedst kendt for ideen om det levende ord, som normalt tolkes som det levende mundtlige ord i modsætning til bøgernes døde bogstav.

For Grundtvig, der tænkte åndshistorisk, formår det levende ord at åbne op og forbinde os med historien - vores forfædres verden, deres sejre, nederlag, idealer, drømme og håb

Masterspeciale i IKT & Læring. Aalborg Universitet 6/7-2006 Rasmus Forman

Udfordringer Varder der deres introduceres introduceres

Better: Working actively on creating positives. It is easier just to say no, and let others decide the future.

But is this what we want?

Talk about it ... The past and the way forward. What we want to keep.

Udfordringer når der introduceres introduceres introduceres introduceres

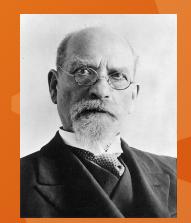
Better:
Working actively on creating positives.

Det levende ord:

Danmark gennem Grundtvig har et folkeoplysningsbegreb, der giver- også med Kierkegaards indflydelse - et mere livsfilosofisk dannelsessyn, der accentuerer det subjektive og følelsesmæssige aspekt.

Masterspeciale i IKT & Læring. Aalborg Universitet 6/7-2006 Rasmus Forman

It is easier just to say no, and let others decide the future. But is this what we want? Talk about it ... The past and the way forward. What we want to keep.



Philosophy on what to do about a world we do not know (that much) about.... Is there only one way?

Well:

Husserl argued that phenomenology was the study of the very nature of what it is to think, "the science of the essence of consciousness" itself.

- Udfordringer system of the sys
- Phenomenology, in Husserl's conception, is primarily concerned with the systematic reflection on and study of the structures of consciousness and the phenomena that appear in acts of consciousness.
 - Phenomenology is the study of phenomena: literally, appearances as opposed to reality. Naturalism takes objectivity as its point of departure, phenomenology asks how objectivity is constituted in the first place.

https://en.wikipedia.org/wiki/Phenomenology_(philosophy)

Not AGI (human level intelligence yet... chatGPT prompts.
Sila, May 2023.

And the technology hasn't reached human level intelligence yet... May 2023...

sı where in the word ketchup does the letter s appear?

In the word "ketchup," the letter "s" appears in the fourth position.

Better:
Working actively on creating positives.

Not AGI (human level intelligence yet... chatGPT prompts. Sila, May 2023.

And the technology hasn't reached human level intelligence yet... May 2023...

sı where imn the ketchup does the letter c appear?

In the word "ketchup," the letter "c" appears in the third position.

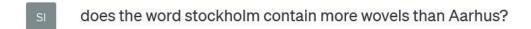
In the word ketchup where does the letter t appear?

In the word "ketchup," the letter "t" appears in the fifth position.

Better:
Working actively on creating positives.

Not AGI (human level intelligence yet... chatGPT prompts. Sila, May 2023.

And the technology hasn't reached human level intelligence yet... May 2023...





"Stockholm" has two vowels ("o" and "o"), while "Aarhus" has one vowel ("a").

does the word stockholm contain more vowels than Aarhus?

Apologies for the previous incorrect response. Let's compare the number of vowels in each word correctly.

The word "Stockholm" contains three vowels ("o", "o", and "o"), while the word "Aarhus" contains two vowels ("a" and "u"). Therefore, "Stockholm" has more vowels than "Aarhus".

The vowels in the alphabet are a, e, i, o, u, and sometimes y.

Better:
Working actively on creating positives.

Kristen Nygaard (27 August 1926 - 10 August 2002) was a Norwegian computer scientist, programming language pioneer, and politician. Internationally, Nygaard is acknowledged as the co-inventor of object-oriented programming and the programming language Simula with Ole-Johan Dahl in the 1960s. Nygaard and Dahl received the 2001 A. M. Turing Award for their contribution to computer science.



Informal meeting at AAU, 2001.

Nygaard: It is ok to read Science Fiction. You might learn something

And much of it isn't all new...

https://en.wikipedia.org/wiki/Kristen_Nygaard

Indeed...
Many SF authors saw it all coming

..

A Fire Upon the Deep and its 'net of a million lies,' and its whole 'groups of people trying to commit genocide because of something they read on the net of a million lies. - April 1992.

And, much of it isn't all new...

Vernor Vinge's 1992 novel A Fire Upon the Deep

Statement about Al 2023:

" resulting in a world with so much fake imagery and text that nobody will be able to tell "what is true anymore."

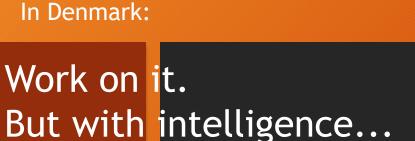
https://www.theverge.com/2023/5/1/23706311/hinton-godfather-of-ai-threats-fears-warnings

Compare with what Science Fiction said all along





https://www.wired.com/2022/11/geeks-guide-fire-upon-the-deep/

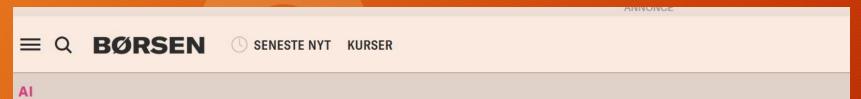


■ Q BØRSEN SENESTE NYT KURSER

ΑI

Tidligere IBM-direktør advarer mod at blive for afhængig af AI: Vigtigt med en exitstrategi, hvis priserne stiger

Pas på Al ikke ender som russisk gas.



Nul europæiske selskaber i AI-førerfeltet: "Det giver to udfordringer"

https://borsen.dk/nyheder/ai/kun-ved-at-tage-ai-i-brug-kan-vi-laere-at-tojle-den

13 Maj 2023.
Jan Damsgaard, professor, Institut for Digitalisering, CBS, og medlem, ATV's Digitale Vismandsråd

15 Maj 2023.

https://borsen.dk/nyheder/ai/opraab-pas-paa-at-ai-ikke-ender-som-russisk-gas

Debat | Professor: Jeg kan ikke advare stærkt nok mod at tøve med AI –

Danmark skal i gang

Ai & ChatBots.

Netværksmøde for studievejledere fra erhvervakademierne.

23 Maj 2023.

Simon Laub, sila@eaaa.dk

Tak!