

Science communication for AI researchers- a short introduction



NeurIPS 2024

Tuesday 10 December

14:00 – 15:00 Talk

15:00 – 16:00 Drop-in

Science communication for AI researchers



Professor Tom Dietterich
Oregon State University



Dr Lucy Smith
Alhub.org

- Alhub is a non-profit (UK charity) dedicated to connecting the AI community to the public by providing free, high-quality information
- We are supported by many leading AI organisations







University of Exeter

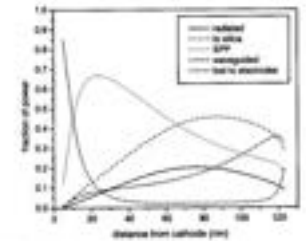
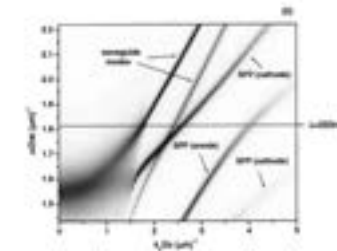
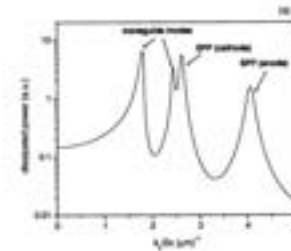
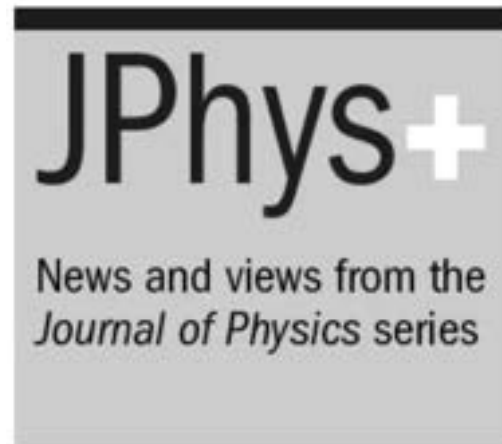
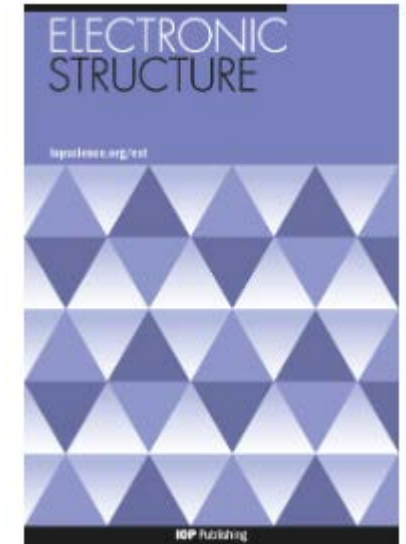


FIG. 3. Fraction of power plot for a substrate-emitting structure with an Ag₂S emissive layer and a silver cathode.

fraction of the total lost to all channels (except nonradiative decay) as a function of the position of the emitters within the organic layer.

Such a plot for a top-emitting structure with a silver cathode is shown in Fig. 2(c). In contrast to substrate emitters, the presence of two metallic electrodes in the top emitters leads to the possibility of more complex SPP modes [Figs. 2(a) and 2(b)]. Indeed in the cases of Ag [Fig. 2(c)] and Al cathodes, we observed two peaks in the fraction of power lost to SPP modes, one occurring when the emitters are closer to the anode and the other when they are closer to

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Tarifa (Spain) to Nordkapp (Norway)





What's coming up at #NeurIPS2024?

We take a look at the programme for the forthcoming NeurIPS conference, to take place in Vancouver.

05 December 2024, by Lacy Smith



An introduction to science communication at #NeurIPS2024

Find out what we are planning to cover in our session at NeurIPS on 10 December.



<https://aihub.org>



aihuborg@gmail.com



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What we'll cover

- Why science communication matters
- Different ways to do science communication
- Working with media
- Communicating via social media
- Writing a blog post
- Tips on explaining complex concepts
- How to find and use suitable images
- How to avoid AI hype
- Unconventional ways to do science communication

Aims

By the end of the session, you should be ready to:

- Communicate your work via social media
- Plan a blog post
- Choose images to illustrate your work



Why science communication matters

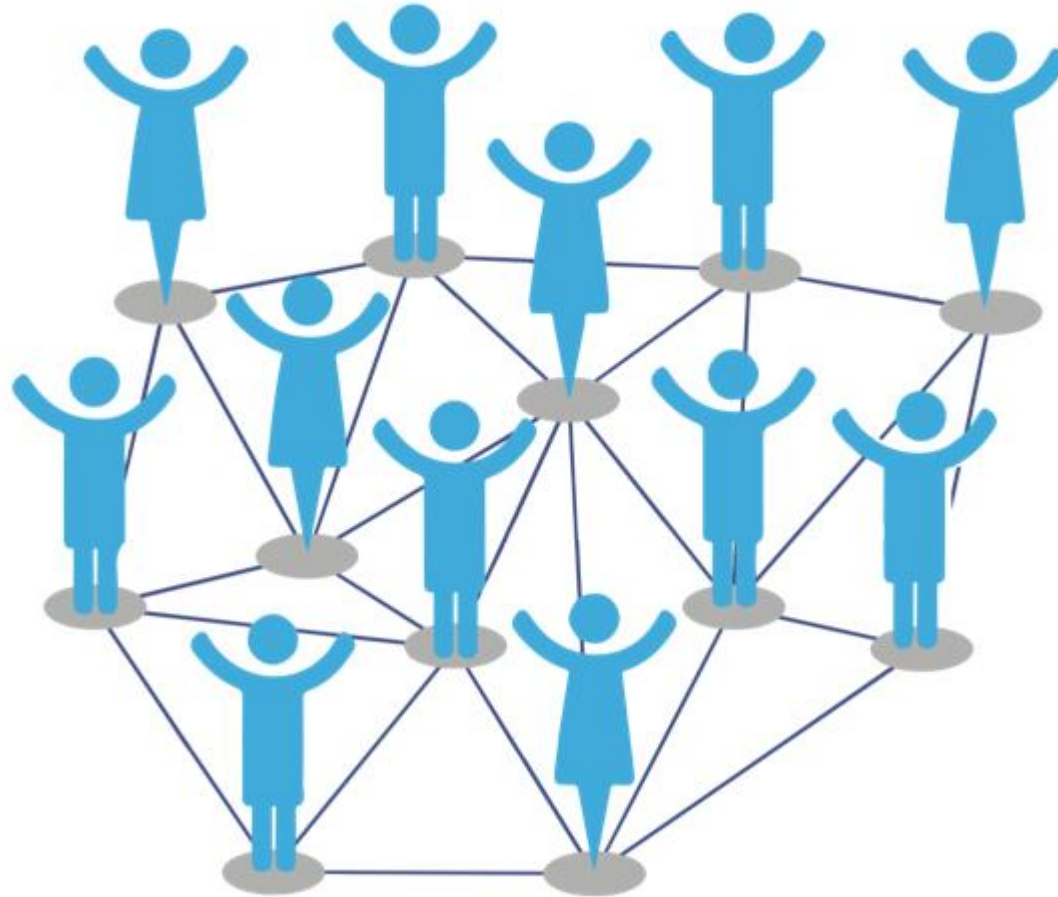


Why science communication matters



Why science communication matters

- Policymakers
- Users
- Investors
- Public



- Expert view
- Demystifying technology
- Inspire others
- Build the future



Benefits of sci-comm for you and your work

- Help build networks
- Find students, collaborators
- Help with grant applications
- Aid your understanding
- Improve your communication skills

Different ways to do science communication

TV, public talks, radio

Blog posts

Collaboration with
artists

Workshops

Competitions

Social media

Podcasts

Exhibitions



Different ways to do science communication
(<https://youtu.be/Jb8eRfItOLE>)

Talks

The video player shows a slide titled "Beyond Large Language Models" with the following text: "Adding missing modules and disentangling factual world knowledge from language and common sense could address virtually all of the shortcomings of today's LLMs". The diagram consists of several blue boxes: "Planning", "Meta-Cognition Self-Monitoring Orchestration", "Formal Reasoning", "Language understanding & generation", "Common sense knowledge", "Factual world knowledge", "Episodic Memory", and "Situation model". There are also icons for an ear, a hand, and a mouth on the slide.

27:08 / 49:46 • Building modular systems to integrate reasoning and planning >

"What's wrong with LLMs and what we should be building instead" - Tom Dietterich - #VSCF2023

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153K views 1 year ago VALENCIA

Nedjma Ousidhoum @nedjmaou · Oct 22

New [arXiv Preprint](#) on how to build better datasets/tools for mid- to low-resource lggies while respecting the labor of the data workers: arxiv.org/abs/2410.12681

We examine 1) "why" people work on mid- to low-resource languages and 2) whether they get properly credited. 1/

How is data collected/annotated?

What is needed?

Nedjma Ousidhoum @nedjmaou · Oct 22

Only 33% of the respondents consistently received credit for their work and 67% did not. This sometimes happened for work that took people more than a month to finish and often due to problematic incentivisation. 3/

Credit Attribution

Incentives

Time Duration

Threads about a research paper – Bluesky / X

Nedjma Ousidhoum @nedjmaou · Oct 22

Based on 87 responses from researchers working on >70 lggies: people often work on mid- to low-resource lggies because they are interested in lggies/CL/NLP/ML... But also because they'd like to work on "their" own lggies & the data may be scarce/non-representative... 2/

Reasons

Reasons

Nedjma Ousidhoum @nedjmaou · Oct 22

Examples of problematic incentivisation include: 1) community membership introduced as worth being added to the CV of a junior researcher, 2) helping the lggie speakers being compensation enough, etc. 4/

Nedjma Ousidhoum @nedjmaou · Oct 22

We reinforce the arguments made by previous work that focuses on the speakers and make recommendations on how to center the people (speakers+data workers), be fair to data workers, set realistic expectations, choose the jargon, and check the data sources. 5/

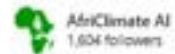
Nedjma Ousidhoum @nedjmaou · Oct 22

Huge thanks to my collaborators @meriembeloucif and @SaifMMohammad and many thanks to anyone who responded to our survey or helped us spread the word x.com/nedjmaou/status... :-}|6/6



The Deep Learning Indaba participants in Dakar, Senegal 1-7 September 2024

AfriClimate AI Participation at the Deep Learning Indaba 2024: From a Spark to a Community, Leading AI for Climate Action



September 13, 2024

The [Deep Learning Indaba 2024](#) was not just another event for us—it was a reunion. For [AfriClimate AI](#), the Indaba represents our birthplace. It was at the Indaba 2023 in Accra, Ghana, that a pivotal conversation ignited a movement, sparking the creation of [AfriClimate AI](#). As [Rendani Mbutya](#), one of our founding members, recalls:

“Last year, I was invited to give a talk about my work on Uncertainty, AI, and Climate Science at the Deep Learning Indaba in Accra, Ghana. As is usual with invited talks, one tends to focus on the successful parts of the work. But for some reason, that morning, I decided to add a slide about the challenges of working in AI and sustainability in Africa, primarily driven by the pervasive data scarcity issues. It turned out that almost everyone in the room identified with

Generating physically-consistent local-scale climate change projections

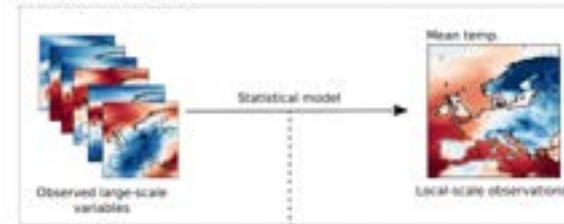
By [Jean-Sebastien Abel](#)

21 January 2024

View this



Observational space



Climate model space



Imagine a farmer in charge of several fruit crops located over a small village in the Spanish countryside. He is worried about the increasing temperature, especially under climate change conditions, as this could have devastating effects on his crops in the future. The only tools available to inform the farmer about the evolution of climate in future scenarios are climate models, which are numerical models simulating the dynamics of climate. However, due to computational and physical limitations, the simulations of these models have very low resolution, spanning hundreds of kilometers, as the farmer has no specific information for the region spanning his crops.

A popular technique to overcome this limitation is statistical downscaling (SD), which consists of learning a statistical model to map from the coarse resolution of climate models to the demanded local-scale. There exist several ways of performing this SD. We focus on the so-called perfect prognosis approach, which learns the mapping between large-scale variables (for example, humidity and winds) and the demanded local-scale variable (for example, mean temperature) on actual measurements (observational data) and then applies it to the simulations of the climate models. This approach can generate local-scale simulations in future scenarios. In the following figure we show a schematic view of the perfect prognosis SD of the mean temperature.



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IEEE Spectrum

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The latest technology news and analysis from the world's leading engineering magazine

ieeespectrum.start.page

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REELS

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Short videos

Video and audio interviews

Alhub series featuring early-career researchers

Alhub
@alhuborg · 111 subscribers · 11 videos
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Latest Popular Oldest

- New voices in AI**
Interview with Dimitri Coelho Mollo
27:43
98 views · 2 years ago
- New voices in AI**
Interview with Chris Emezue - New voices in AI
22:04
84 views · 2 years ago
- New voices in AI**
Interview with Oumaima Hajri - New Voices in AI
20:25
253 views · 2 years ago
- New voices in AI**
Interview with Nicolò Brandizzi - New Voices in AI
13:13
68 views · 2 years ago
- New voices in AI**
Interview with Maria De-Arteaga - New voices in AI
20:49
125 views · 2 years ago
- New voices in AI**
Interview with Isabel Cachola - New Voices in AI
8:54
62 views · 2 years ago



YouTube channel News, opinions and explainers



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2.3K views · 1 month ago



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What a time to be alive! ...more

[users.cg.tuwien.ac.at/zsolnai](#) and 3 more links

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NVIDIA's New AI: Stunning Voice Generator!

127K views · 7 days ago



AlphaFold 3 AI Just Won The Nobel Prize!

238K views · 6 months ago

Short films



The Wizard of AI, Alan Warburton






Data Justice, The Alan Turing Institute

Competitions

AI Song Contest

The screenshot displays the 'AI Song Contest 2024' website interface. At the top left is the logo 'AI SONG CONTEST 2024'. At the top right are navigation links: 'Home', 'Finalists', and 'Participants'. Below the navigation is a grid of three featured song cards, each with a play button icon, a title, and an artist name.

Image	Song Title	Artist
	Do AIs Dream?	Yun+More
	Genre Cannon	Dadabots
	Sudamérica	Onda Corta

Workshop highlights 'pivotal moment' for future of AI in space exploration



The *In-Space Physical AI Workshop*, held recently at the *Ion District* in Houston, convened top scientists, engineers, entrepreneurs and government leaders to explore the role of artificial intelligence (AI) in space exploration — a domain poised to drive scientific discovery, economic growth and technological advancements.



Camden Council data and AI workshops for residents

Workshops

AI, Music, and the Human Spirit

Wednesday, 12 June 2024 100 pm - 5:00 pm

[Our Mission](#) London

AI, MUSIC, AND THE HUMAN SPIRIT

Wednesday, June 12 | 1 - 5pm (GMT+1)
The Royal Society, 6-9 Carlton House Terrace
London SW1Y 5AG

FREE tickets

The Faculty of Autonomous Systems Hub **RAI**

Location: The Royal Society, 6-9 Carlton House Terrace, London, SW1Y 5AG

An event from Responsible AI (UK)

Collaborations with artists



Co-creating Better Images of AI



Journalists and musicians gather to hear a pianist perform parts of Beethoven's 10th Symphony. Ahmed Elgammal, [CC BY-SA](#)

Why don't more people do science communication?



Don't know how



Don't have time



Don't have an audience

What's the first step?



How do you want to communicate?

With help from external sources

- **Press office**
- **Media**

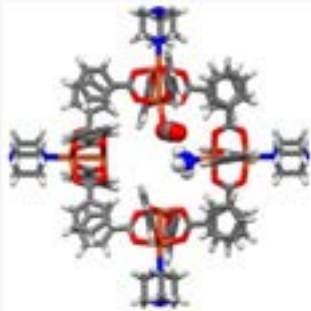
You control the communication

- **Social media**
- **Blog post**
- Podcast, videos
- **Unconventional sci-comm**

Using your press office



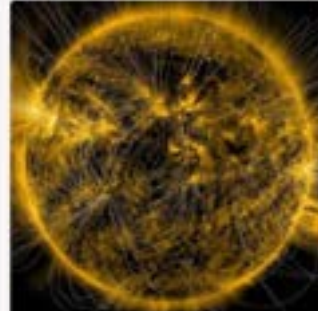
Newsroom



Chemical structure's carbon capture ability doubled by Oregon State University



New 3D printing approach means better biomedical, energy, robotics devices



Scientists make Wile E. Coyote observation, confirming theory of how solar flares are created



DECEMBER 3, 2024

MedInclude partners with Grand River Hospital to improve patient communication with AI



DECEMBER 2, 2024

Tech Horizons showcases AI, innovation for business leaders



NOVEMBER 26, 2024

Driving global social impact with innovative technology

EPFL NEWS



Stimulating hypothalamus restores walking in paralyzed patients



Could ChatGPT get an engineering degree?

Using your press office

- Does your Institute / company have a press office?
- Connect with them
- They can help promote your work
 - Quotes
 - Short summary
 - Images / photos

Working with the media - some tips

Pitching

- Tell a story
 - What are the broader implications of your work
 - Don't just state the results
 - Do you have a hook?
- A video / image can be helpful in “selling” the story
- Try to connect with the journalist before sending your pitch

Working with the media - some tips

Types of questions a science journalist may ask

- Background to the research
 - Where did the idea come from?
 - What inspired you to work on this project?
- Context
 - What is the current state of the field?
 - Previous work
 - What are some of the main challenges in this field?
 - Plans for future work

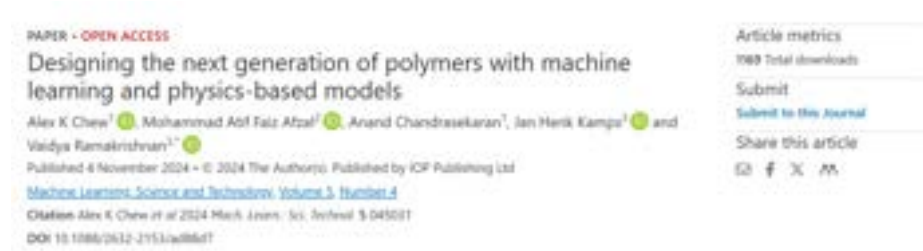
Working with the media - some tips

Tips for answering

- Make your answers accessible
 - Try to avoid jargon and acronyms
 - Try to avoid technical specifics
- Try to connect your research to them (and the reader)
 - How would this impact on people and their lives?
 - What are the [potential] applications?

Can you use LLMs to help you prepare?

L What questions might a science journalist ask about this paper?
<https://iopscience.iop.org/article/10.1088/2632-2153/ad88d7>



- **Novelty:** How novel is the approach of combining machine learning and physics-based simulations for polymer design? What are the key advantages over traditional methods?
- **Data Limitations:** The study relies on a relatively small dataset. How does this limitation impact the accuracy and generalizability of the machine learning models?
- **Model Interpretability:** Can the machine learning models provide insights into the underlying relationships between molecular structure and polymer properties?

The importance of owning your sci-comm

- When someone else reports on your work you may lose control over the content

Robot Programmed To Fall In Love
With a Girl Goes Too Far

News / Technology

Toshiba unveils the creepy robot that
could one day steal your job

By Mary Jordan | 3:20pm Jan 8, 2015

Miracle robot will revolutionise brain surgery for
epilepsy sufferers

DOOM AND GLOOM Creepy AI predicts what the Apocalypse will
look like after scientists reset Doomsday Clock for 2023

'KILLER' BOTS Rogue superhuman AI 'could
kill everyone' and wipe out human race...
the tech should be controlled like nukes

INNOVATION

This "Psychic Robot" Can Read Your Mind

How?

With help from external sources

- Press office
- Media

You control the communication

- **Social media**
- **Blog post**
- Podcast, videos
- **Unconventional sci-comm**

A starting point to communicating directly: social media



A starting point to communicating directly: social media

- Ways to use social media for your research:
 - Passive
 - Active



How using social media can benefit your research

- passive

- Follow other researchers in the field
 - Who do they follow?
 - Follow their followers.
 - Build your network.



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- Find out about events / workshops / other interesting content
- Find out about grants / positions / opportunities



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- Follow journalists



How using social media can benefit your research

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 - Build your network.
- Find out about events / workshops / other interesting content
- Find out about grants / positions / opportunities
- Follow journalists
- Read constructive discussions



Thomas Dieterich @tdieterich.bsky.social · 1mo

Does anyone know of groups studying how knowledge is retrieved, ranked, and filtered in GPT architectures? Can we blame hallucinations on failures in this process? Can SGD detect and fix errors in the process? Thanks for any pointers!

3



4



Jelle Zuidema @wzuidema.bsky.social · 1mo

Mor Geva et al had a great 2020/21 paper on viewing the MLPs in LLMs as key-value memories. Many later studies on factual retrieval have built on this, including much 'model editing' work.

aclanthology.org/2021.emnlp-m...

For ranking, filtering & the difference between pretrained & finetuned
1/2

How using social media can benefit your research - active

- Use to promote your research
 - Can be a great tool for refining your message
 - How would you compress your research into a social media post or thread?
- Engage in constructive discussions
- Build connections with other researchers, journalists, organisations
- Feel part of a community
- Amplify the voices of others



Caveats

- Can be easy to get sucked into controversies and arguments
- Short-form of social media posts often not conducive to in-depth discussions
- High frequency of activity needed



Using social media to communicate your work



Finding your story

- Which aspect of your research would you like to tell people about?
- How are you going to tell them?



What makes a good story?

- Pitched at the right level for the audience



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- Pitched at the right level for the audience
- Connects with the audience:
 - Contains a link to application(s) from the real world
 - Touches on a lived experience / passion / problem



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- Takes the readers on a journey



What makes a good story?

- Pitched at the right level for the audience
- Connects with the audience:
 - Contains a link to application(s) from the real world
 - Touches on a lived experience / passion / problem
- Takes the readers on a journey
- Has a structure and natural flow



Your story on social media

- What problem are you trying to solve? *
- Why is it important?
- How does this relate to people's lives?
- What is the current state of the field?
- What's the contribution of your research? *
- What are the implications of your findings?
- What challenges did you face?
- What are the limitations of your contribution?
- What are you planning next?

(* minimum starting point for communication on a social media platform)



Example from a ML research paper

IOP Publishing

Mach. Learn.: Sci. Technol. 3 (2022) 045034

<https://doi.org/10.1088/2632-2153/aca23d>

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PAPER

Self-supervised learning of materials concepts from crystal structures via deep neural networks

Yuta Suzuki^{1,2*}, Tatsunori Tanai¹, Kotaro Saito^{3,4}, Yoshitaka Ushiku¹ and Kanta Ono^{1,2,5,*}

¹ The Graduate University for Advanced Studies (SOKENDAI), Ibaraki, Japan

² Institute of Materials Structure Science (IMSS), High Energy Accelerator Research Organization (KEK), Ibaraki, Japan

³ OMRON SINIC X Corporation, Tokyo, Japan

⁴ Randefi, Inc., Tokyo, Japan

⁵ Department of Applied Physics, Osaka University, Osaka, Japan

⁶ Current affiliation: Advanced R&D and Engineering Company, TOYOTA MOTOR CORPORATION, Shizuoka, Japan.

* Author to whom any correspondence should be addressed.

E-mail: ono@ap.eng.osaka-u.ac.jp

Keywords: materials informatics, deep metric learning, crystal structure, self-supervised learning

Supplementary material for this article is available [online](#)

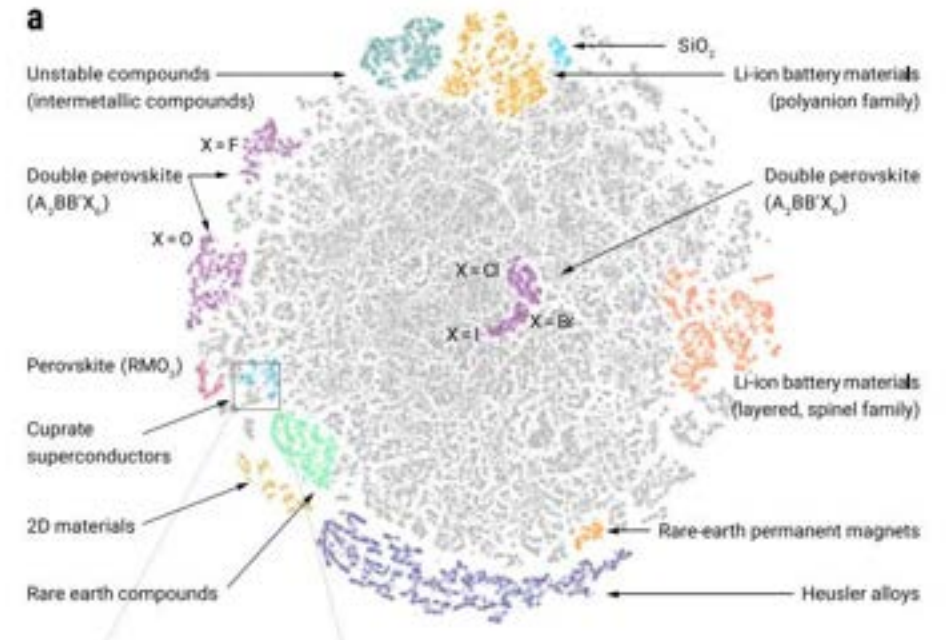
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11 November 2022

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29 December 2022

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Your story as a social media post / thread

The questions:

- What problem are you trying to solve?
- Why is it important?
- How does this relate to people's lives?
- What is the current state of the field?
- What's the contribution of your research?
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Materials discovery is a slow process that involves searching through a vast space of potential structures. Key to accelerating this process is understanding how the structure of a material affects its function. Suzuki *et al* have used ML to better understand, and map, this relationship.

Turning your social media summaries into a blog post



Our example research paper

IOP Publishing

Mach. Learn.: Sci. Technol. 3 (2022) 045034

<https://doi.org/10.1088/2632-2153/aca23d>

MACHINE
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OPEN ACCESS

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* Author to whom any correspondence should be addressed.

E-mail: ono@ap.eng.osaka-u.ac.jp**Keywords:** materials informatics, deep metric learning, crystal structure, self-supervised learningSupplementary material for this article is available [online](#)

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Turning your social media summaries into a blog post

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Turning your social media summaries into a blog post

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Imagine you are working on developing a new material for an efficient battery. Where do you start? How do you go about finding that material? What structure would give you the properties you are looking for?

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Turning your social media summaries into a blog post

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Now, imagine you could accelerate part of this process and narrow your search. The key to doing this is through an understanding the relationships between the structures of materials and their functional properties, as the diverse properties of materials are determined by their structures.

Turning your social media summaries into a blog post

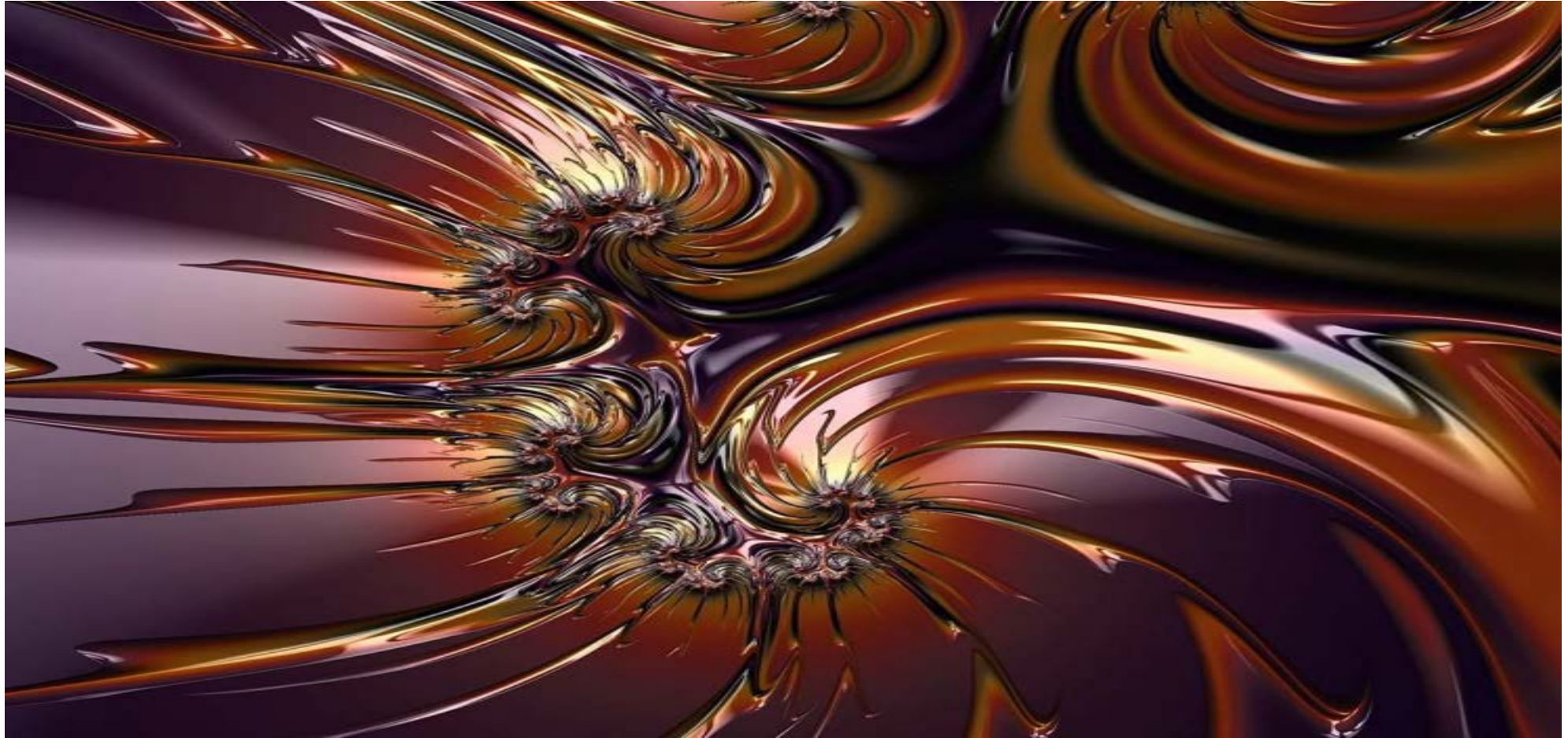
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Now, imagine you could accelerate part of this process and narrow your search. The key to doing this is through an understanding the relationships between the structures of materials and their functional properties, as the diverse properties of materials are determined by their structures. In their research, Suzuki *et al* used machine learning (ML) techniques to create a map of the materials space and measure the similarity between materials.

Simplifying complex concepts



Levels of complexity



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PAPER

Self-supervised learning of materials concepts from crystal structures via deep neural networks

Yuta Suzuki^{1,2,3}, Tatsunori Taniai², Kotaro Saito^{1,4}, Yoshitaka Ushiku¹ and Kanta Ono^{1,2,3*}

Using a couple of sentences about their method and contribution as an example.

Level 1: suitable for a ML/physics audience.

- Suzuki *et al* have used a self-supervised deep learning approach to learn material embeddings from crystal structures of over 120 000 materials. This enabled them to capture relationships between the structure of a material and its properties.

Levels of complexity



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1 July 2022

PAPER

Self-supervised learning of materials concepts from crystal structures via deep neural networks

Yuta Suzuki^{1,2,3}, Tatsunori Taniai², Kotaro Saito^{1,4}, Yoshitaka Ushiku¹ and Kanta Ono^{1,2,3*}

Using a sentence about their method and contribution as an example.

Level 1: suitable for a ML/physics audience.

- Suzuki *et al* have used a self-supervised deep learning approach to learn material embeddings from crystal structures of over 120 000 materials. This enabled them to capture relationships between the structure of a material and its properties.

Levels of complexity



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PAPER

Self-supervised learning of materials concepts from crystal structures via deep neural networks

Yuta Suzuki^{1,2,3*}, Tatsunori Tanai¹, Kotaro Saito^{2,4}, Yoshitaka Ushiku¹ and Kanta Ono^{1,2,3,4*}

Level 2: suitable for a tech/science-savvy audience (e.g readers of Wired or MIT Tech Review)

- Suzuki and colleagues have used a deep neural network (a type of machine learning algorithm) to better understand relationships between the structure of a material and its properties. Such properties could include superconductivity, or magnetism, for example. The researchers trained their model on 120 000 known materials and the algorithm learned the key features of each material, then mapped that material to a point in a multi-dimensional space. The closer two materials are to one another in this space, the greater the similarity between their properties.

Levels of complexity



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Level 3: suitable for a more general audience.

- Researchers have used a machine learning algorithm to better understand materials and their properties. Such properties could include superconductivity, or magnetism, for example. The algorithm was trained on data about over 120 000 different materials and used this information to group the materials according to the similarity of their properties. The method for clustering similar materials is like that used for recommender systems (“you’ve seen this film, so here’s another you may like”). However, instead of the algorithm suggesting films similar to those you’ve seen before, it can indicate materials with similar properties.

Levels of complexity



CrossMark

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1 July 2022

PAPER

Self-supervised learning of materials concepts from crystal structures via deep neural networks

Yuta Suzuki^{1,2,3,4}, Tatsunori Taniai¹, Kotaro Saito^{1,4}, Yoshitaka Ushiku¹ and Kanta Ono^{1,2,3,4}



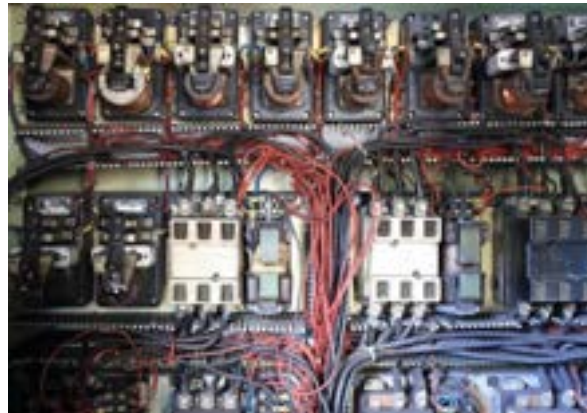
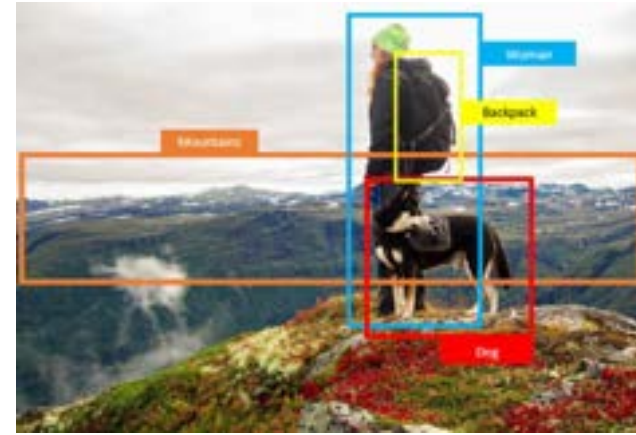
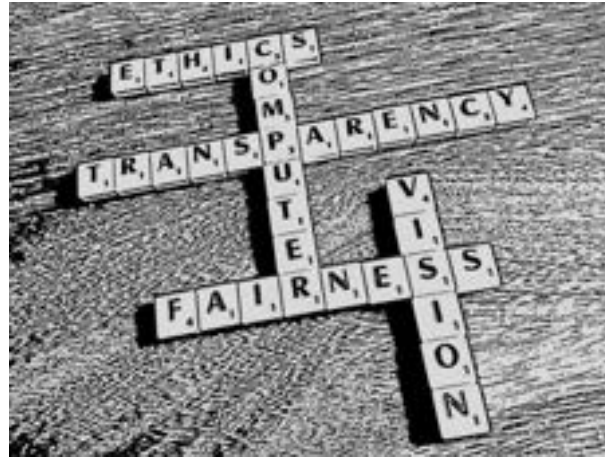
rewrite this so that a 14-year old could understand it: Suzuki et al have used a self-supervised deep learning approach to learn material embeddings from crystal structures of over 120 000 materials. This enabled them to capture relationships between the structure of a material and its properties



Imagine you have a giant puzzle with over 120,000 pieces, each representing a different material. Each piece has a unique shape and color, showing how the atoms in the material are arranged. Scientists used a super smart computer program to learn the patterns in these shapes and colors. This program, called a deep learning model, got better and better at recognizing the patterns by looking at lots of different puzzle pieces.



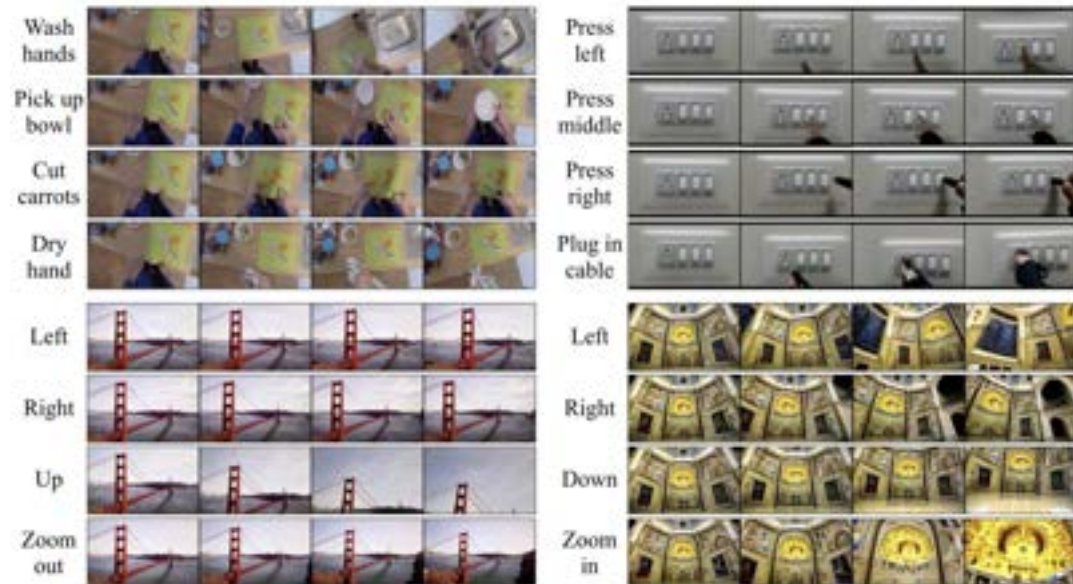
Creating a portfolio of media



Creating a portfolio of media

Enhancing your blog posts with images and videos can:

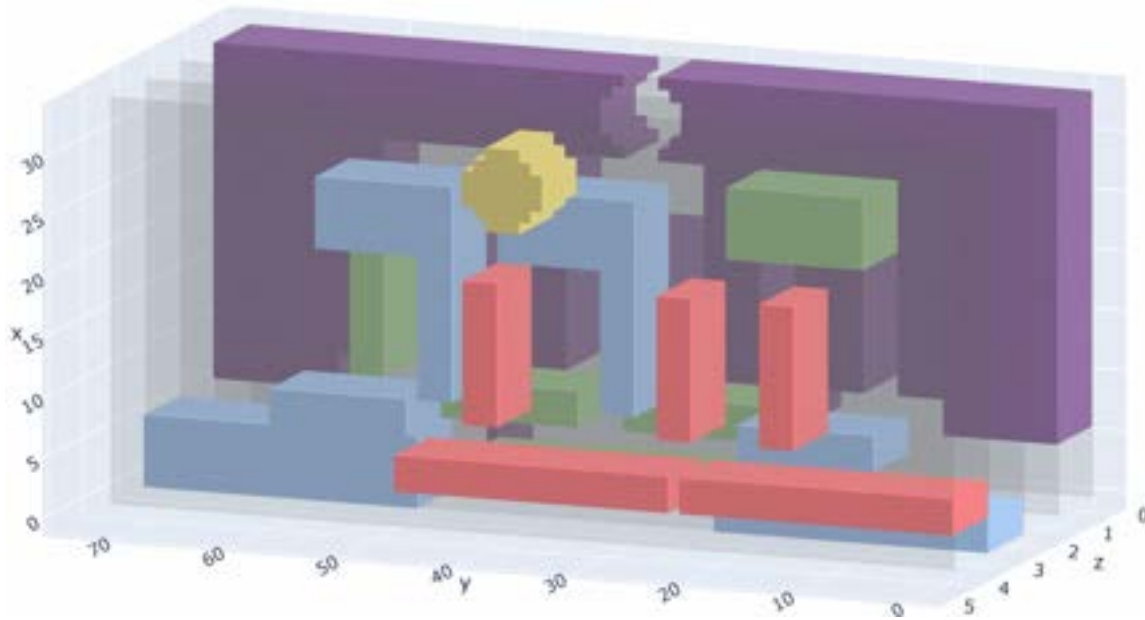
- Help increase the visual impact of your work
- Aid the understanding of concepts you are describing



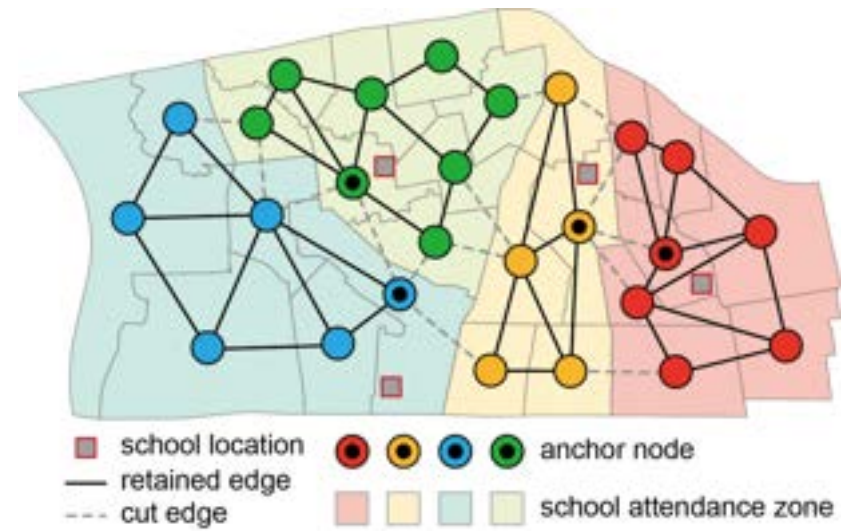
Credit: Sherry Yang

Creating a portfolio of media

- Option 1: use photos, graphs, images from your own research



Credit: Matthew Stephenson and Frederic Abraham



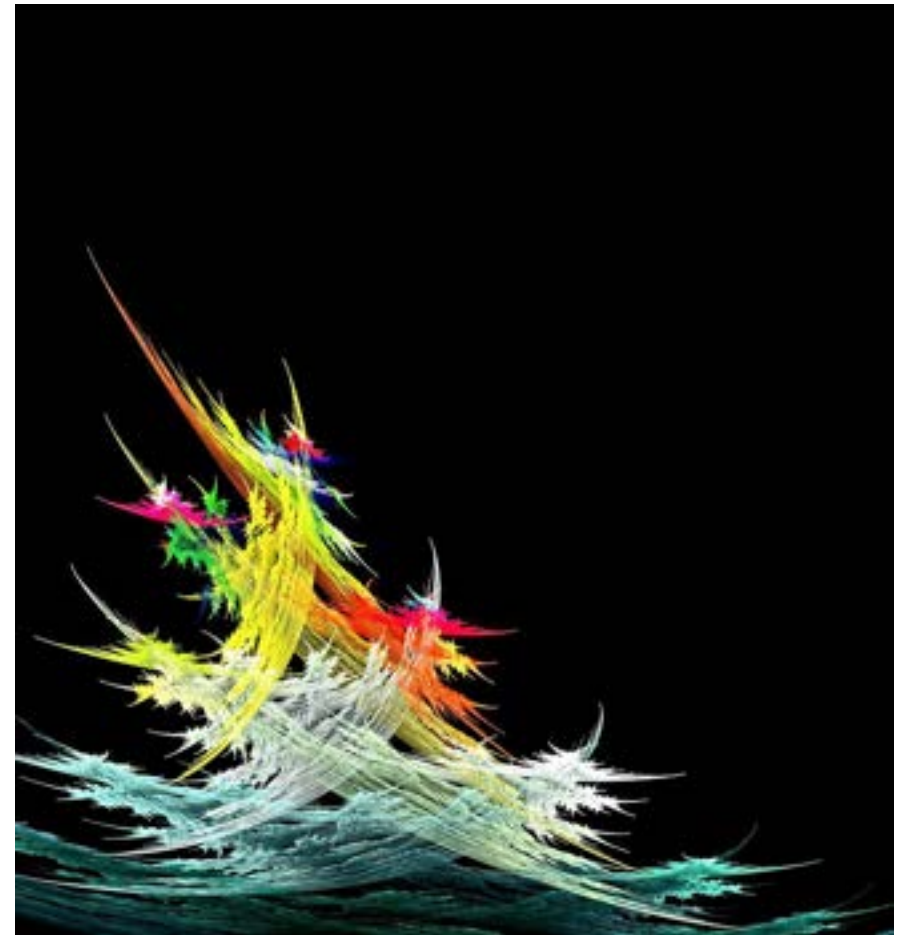
Credit: Fanglan Chen



Credit: Guillem Alenya

Creating a portfolio of media

- Option 2: Use stock images. Either bought...



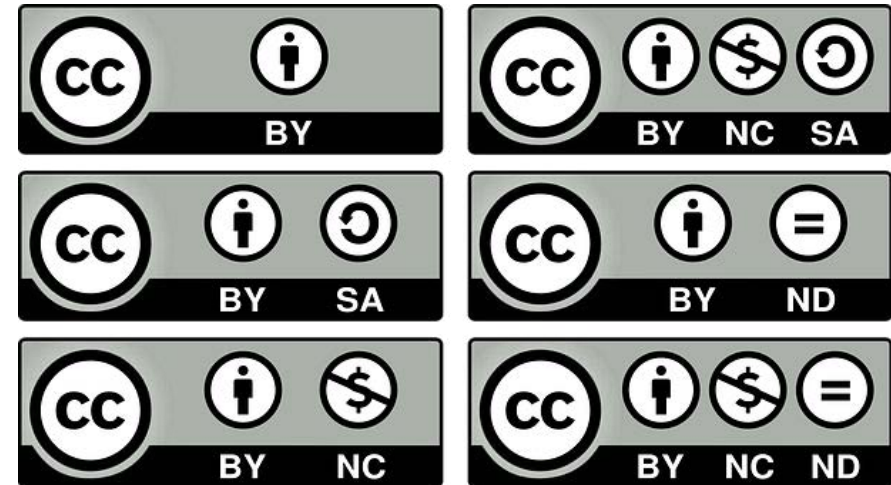
Creating a portfolio of media

- Option 2: Use stock images.... or free to use
- Be sure to check the license conditions for reproducing the image.



Creative commons licenses

- A Creative Commons (CC) license is one of several public copyright licenses that enable the free distribution of an otherwise copyrighted "work".



Creative commons licenses



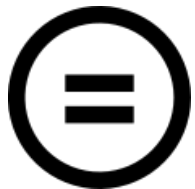
- **Attribution.** Give attribution to original author(s)



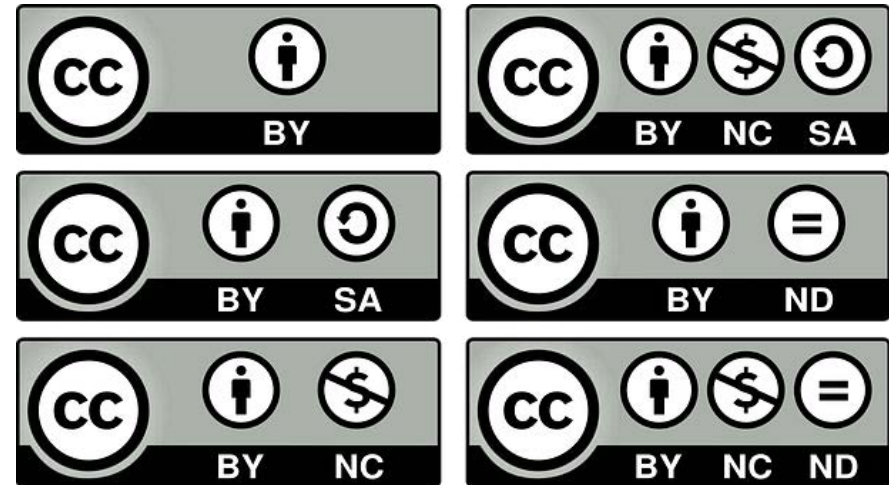
- **Share-alike.** You must share using a licence identical to the original



- **Non-commercial.** You cannot reproduce for commercial purposes.



- **No derivative works.** You cannot change or remix the content.



Creating a portfolio of media

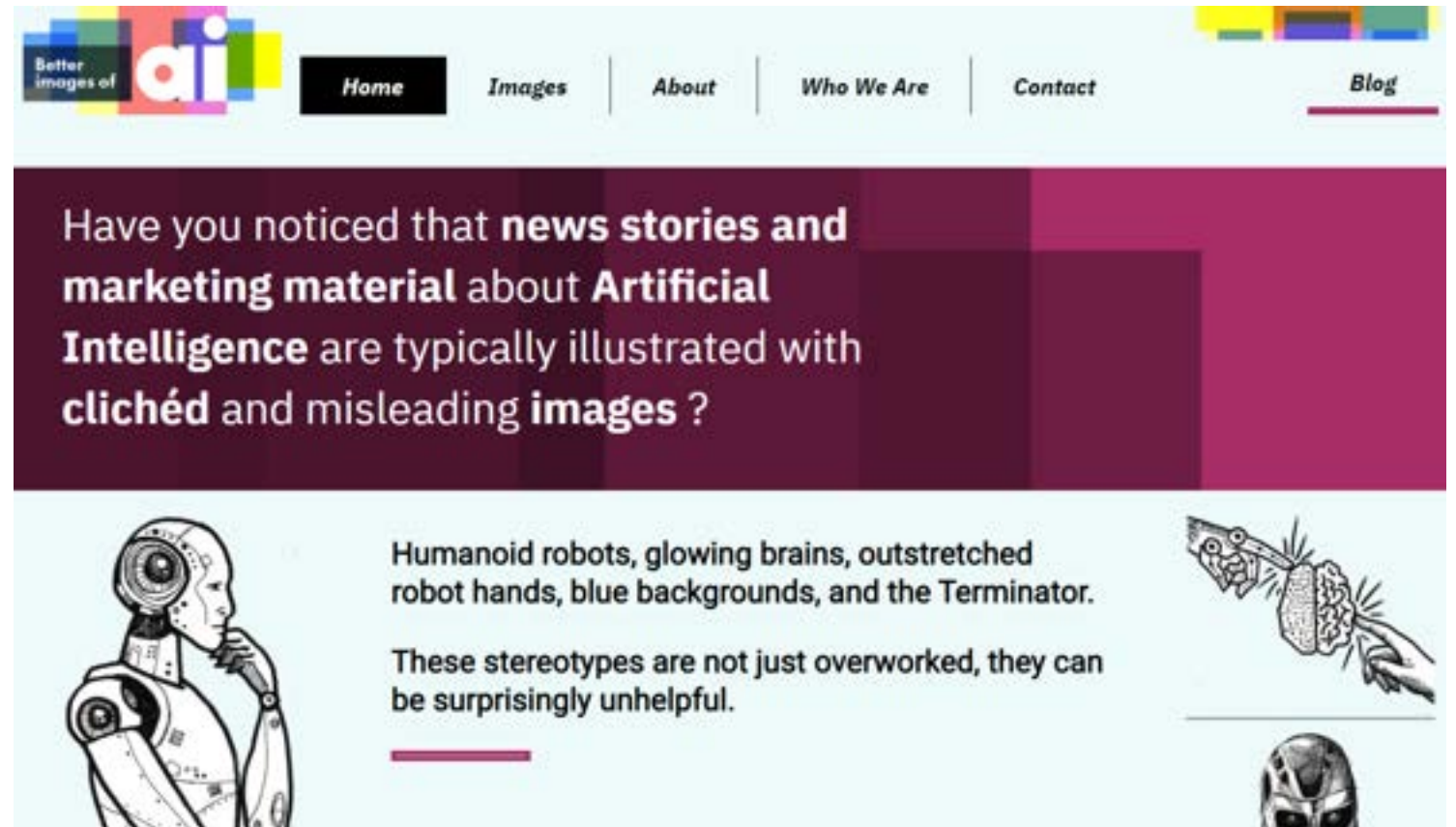
- <https://pixabay.com/>
- <https://unsplash.com/>
- <https://snappygoat.com/>
- <https://www.pexels.com/>
- <https://burst.shopify.com/>
- <https://www.flickr.com/>
- https://commons.wikimedia.org/wiki/Main_Page



Better Images of AI

Better Images of AI

<https://betterimagesofai.org/>



The screenshot shows the homepage of the website 'Better Images of AI'. At the top left is the logo 'Better images of ai' with 'ai' in a colorful font. To the right is a navigation menu with links for 'Home', 'Images', 'About', 'Who We Are', 'Contact', and 'Blog'. The main content area has a dark purple background with the text: 'Have you noticed that **news stories and marketing material** about **Artificial Intelligence** are typically illustrated with **clichéd** and misleading **images** ?'. Below this, there are three columns of text and illustrations. The first column features a line drawing of a humanoid robot. The second column contains the text: 'Humanoid robots, glowing brains, outstretched robot hands, blue backgrounds, and the Terminator. These stereotypes are not just overworked, they can be surprisingly unhelpful.' The third column shows a line drawing of a brain with a hand pointing to it, and a small image of a Terminator robot head at the bottom.

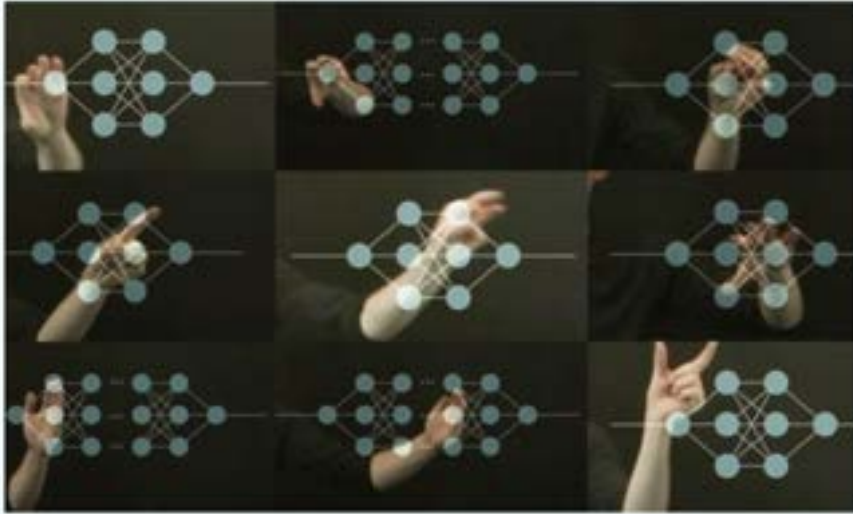
Better images of ai

Home | Images | About | Who We Are | Contact | Blog

Have you noticed that **news stories and marketing material** about **Artificial Intelligence** are typically illustrated with **clichéd** and misleading **images** ?

Humanoid robots, glowing brains, outstretched robot hands, blue backgrounds, and the Terminator.

These stereotypes are not just overworked, they can be surprisingly unhelpful.



Explainable AI - Alexa Steinbrück



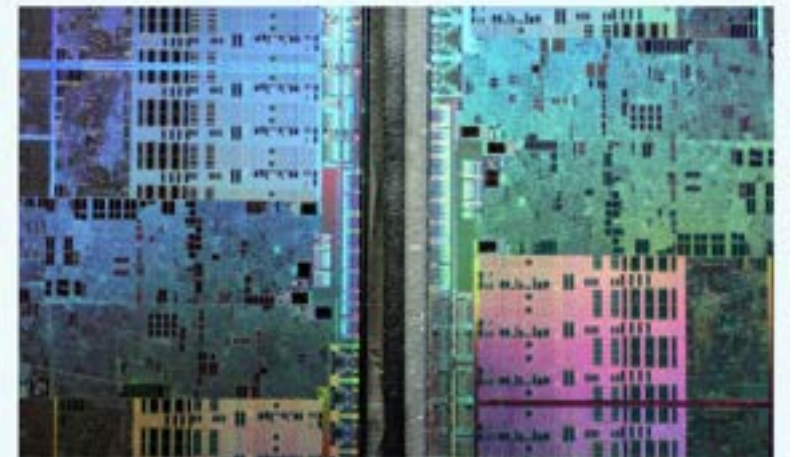
Fish reversed - Rens Dimmendaal & David Clode



Autonomous Driving - Anton Grabolle



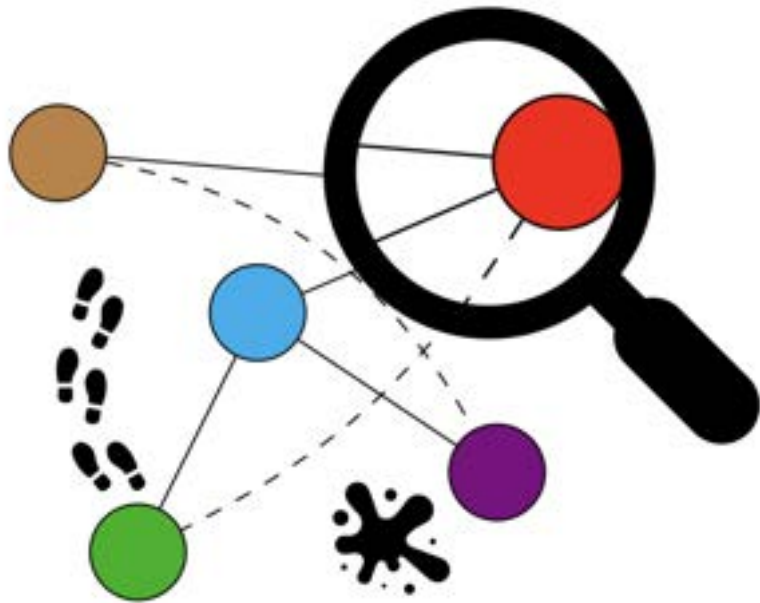
Quantified Human - Alan Warburton



GPU shot etched 5 - Fritzchens Fritz

Creating a portfolio of media

- Option 3: create your own images



Credit: Ramon Fernández Mir and Lauren Nicole DeLong



<https://aixdesign.co/posts/archival-images-of-ai>

Welcome to Archival Images of AI : Creating better images of AI through digital heritage

We invite you to play with it, tear it, glue it or rip it apart.

THIS PLAYBOOK IS THE RESULT OF OUR RESEARCH INTO HOW EXISTING IMAGES – ESPECIALLY THOSE FROM DIGITAL HERITAGE COLLECTIONS – CAN BE REMIXED AND REUSED TO CREATE NEW IMAGES, PARTICULARLY TO REPRESENT AI IN MORE COMPELLING WAYS.

Archival Images of AI

Creating better images of AI through digital heritage

FLOIRALIN FLYNN
NADIA PIET
DOMINIKA CUPKOVA
CRISTOBAL ASCENCIO
HANNA BARAKAT
ZEINA SALEEM
ERYK SALVAGGIO

AI X DESIGN

ai

SOUND & VISION

Creating a portfolio of media

- Option 4: AI-generated images

Try to include your prompt



Image created by author using DALL.E.
Prompt: "A woman getting into a self driving car. Cartoon style"



Image created using DALL-E with the prompt "Games, Chemistry, Artificial Intelligence".



Image generated with DALL-E. Prompt: "An AI learning to crack tough puzzle (with no text on the image)"



Hype

Whilst it can be good to create a buzz around your research, too much hype tends to:

Hype

Whilst it can be good to create a buzz around your research, too much hype tends to:

- Set inflated expectations about the technology

11-19-2024 | DESIGN

This AI taught itself to do surgery by watching videos—and it's ready to operate on humans

The new smart robot developed by Johns Hopkins and Stanford University researchers learned by watching videos of surgeries. Now it can perform procedures with the skill level of a human doctor.

Technology

Housework robot can learn to do almost any chore in 20 minutes

A robotic assistant can learn to do household jobs like opening cupboards, pulling out chairs or taking a towel off a rail after a bit of training using a stick with an iPhone on it

Hype

Whilst it can be good to create a buzz around your research, too much hype tends to:

- Set inflated expectations about the technology
- Drive unnecessary fears in the general public

NEWS / CAR TECH

Self-Driving Cars Could Steal 300,000 American Jobs a Year, Goldman Sachs Says

THE STANDARD 

LIFESTYLE

Is the AI apocalypse actually coming? What life could look like if robots take over

From job losses to mass extinction events, experts are warning that AI technology risks opening a Pandora's Box of horrors if left unchecked — are they right to be sounding the klaxon? Katie Strick reports

Hype

Whilst it can be good to create a buzz around your research, too much hype tends to:

- Set inflated expectations about the technology
- Drive unnecessary fears in the general public
- Detract from meaningful discussions about the actual aspects of the technology that we need to be concerned about



How the Other Half Lives: The Hidden Labor Behind ChatGPT | Karen Hao



Tips for avoiding hype in your sci-comm



Tips for avoiding hype in your sci-comm

- Don't exaggerate the impact of your work:
 - Be specific about your contribution
 - Make any limitations clear
 - Try to avoid superlatives: “best, first, ...” etc (unless you can back up your claim)
- Try to avoid anthropomorphism
 - “decides”, “judges”, “understands”

Artifice and Intelligence

EMILY TUCKER / MAR 16, 2022

Emily Tucker is the Executive Director of the [Center on Privacy & Technology at Georgetown Law](#).

"My quarrel with the English language has been that the language reflected none of my experience. But now I began to see the matter in

Starting today, the Privacy Center will stop using the terms “artificial intelligence,” “AI,” and “machine learning” in our work to expose and mitigate the harms of digital technologies in the lives of individuals and communities.

AUTHORS



EMILY TUCKER

Emily Tucker is the Executive Director at the Center on Privacy & Technology at Georgetown Law, where she is also an adjunct professor of law. She shapes the Center’s strategic vision and guides its programmatic work. Emily joined the Center after serving as a Teaching Fellow and Supervising Attorne...

(1) Be as specific as possible about what the technology in question is and how it works. For example, instead of saying “face recognition uses artificial intelligence,” we might say something like “tech companies use massive data sets to train algorithms to match images of human faces.” Where a complete explanation is disruptive to our larger argument, or beyond our expertise, we will point readers to external sources.

(2) Identify any obstacles to our own understanding of a technology that result from failures of corporate or government transparency. For example, instead of saying “employers are using AI to analyze workers’ emotions” we might say “employers are using software advertised as having the ability to label workers’ emotions based on images of them from photographs and video. We don’t know how the labeling process works because the companies that sell these products claim that information as a trade secret.”

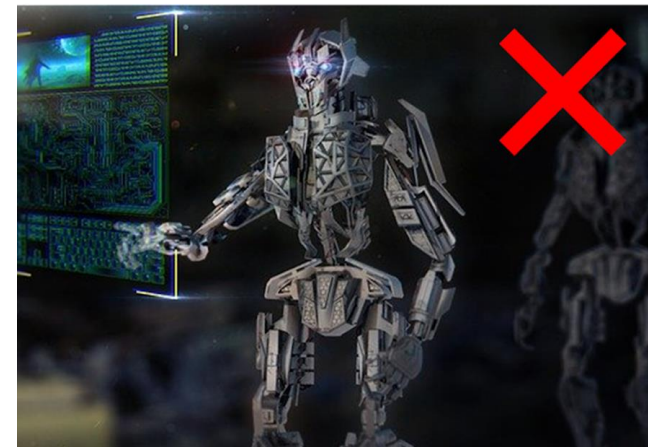
(3) Name the corporations responsible for creating and spreading the technological product. For example, instead of saying “states use AI to verify the identities of people applying for unemployment benefits,” we might say “states are contracting with a company called ID.me, which uses Amazon Rekognition, a face matching algorithm, to verify the identities of people applying for unemployment benefits.”

(4) Attribute agency to the human actors building and using the technology, never to the technology itself. This needn’t always require excessive verbiage. For example, we might substitute “machine training,” which sounds like something a person does with a machine, for “machine learning” which sounds like a computer doing something on its own.

Artifice and Intelligence

Tips for avoiding hype in your sci-comm

- Choose relevant images: avoid stereotypical images of robots from science fiction!
- Title: this can be catchy, but try to prioritize scientific accuracy



Unconventional ways of doing sci-comm



Swarm escape



Swarm escape



Immersive theatre

Back by popular demand!
10-12 & 15-18 March 2018
3pm & 7.30pm
Secret location
in Clifton, Bristol
Tickets: £10/£8
Pre-booking essential
kiltertheatre.org/invincible

Kilter Theatre presents
INVINCIBLE
what would you decide?
in partnership with Bristol SynBio
written by David Lane

kilter
beyond theatre

BrisSynBio
University of BRISTOL
synenergene
European Union flag

The AI Song Contest

The screenshot displays the website for the AI Song Contest 2024. At the top left is the logo for the contest, and at the top right are navigation links for Home, Finalists, and Participants. The main content area features three song cards, each with a thumbnail image, a play button, the song title, and the artist's name.

Thumbnail	Song Title	Artist
	Do AIs Dream?	Yun+More
	Genre Cannon	Dadabots
	Sudamérica	Onda Corta

TV / film discussion



Smoov and Curly on Video E01



Michael Littman
1.2K subscribers

Subscribe

👍 57



➦ Share



- AI researchers discuss Westworld!
- Commenting on the AI, machine learning and computer science ideas in the show

Other unconventional ways of doing sci-comm

Some examples to think about:

- Photograph essay
- Comic
- Stand-up monologue
- Short film
- Sci-fi book
- Food dish
- Escape room
- Sitcom
- Dance
- Theatre play
- Painting
- Sculpture
- Music festival performance
- Children's book
- Video game
- Tik tok

Who is your audience, and could any of these formats help you communicate better?
Are there any aspects of your research that work with any of these formats?

Next steps

- Try out some of the exercises from this talk
- From 3-4pm: an informal session to discuss any ideas you have regarding sci-comm
- Interested in covering NeurIPS for AIhub?
- Reach out to us - we can work with you to help you shape your story
- <https://aihub.org/science-communication-for-ai-researchers-an-introduction-at-neurips2024/>



aihuborg@gmail.com



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Questions?

