

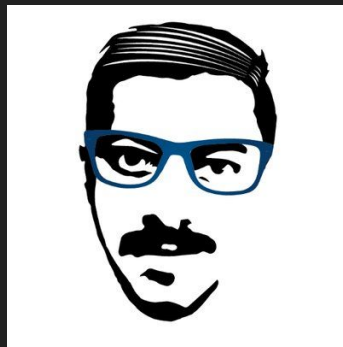
How to write an effective ML
or NLP paper summary?

About me

Elvis Saravia

Education Architect @ Elastic

Editor and Research Scientist @ dair.ai



[omarsar0](https://twitter.com/omarsar0)



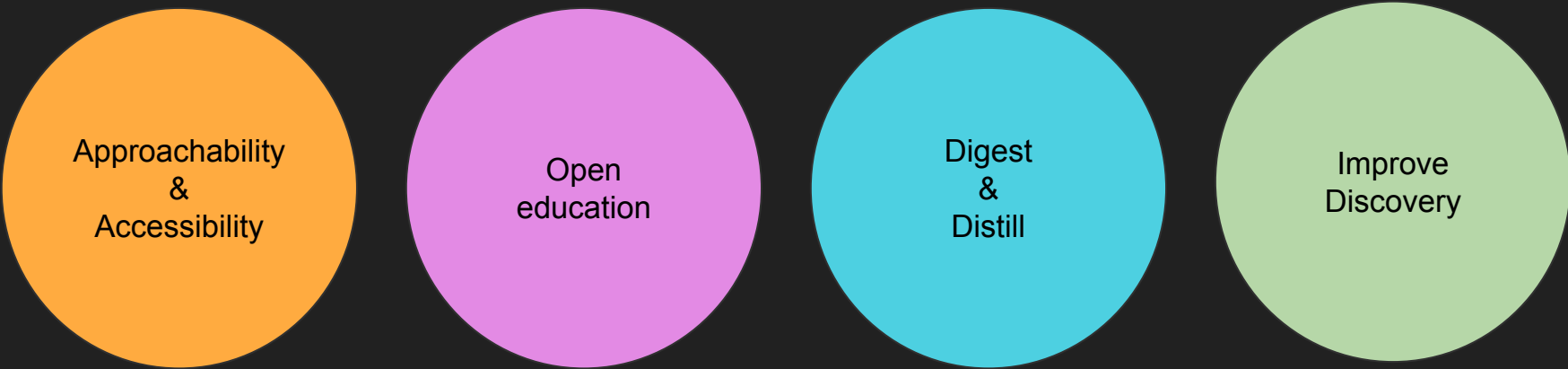
About dair.ai

A community-driven effort to democratize artificial intelligence research, education, and technologies.

Projects: Paper Summaries, NLP Overview, Online Paper Discussions, NLP Research, Notebooks, and other educational resources.

[Website](#) | [GitHub](#) | [Twitter](#) | [Meetups](#) | [Newsletter](#) | [Slack](#)

Why paper summaries matter?



Approachability
&
Accessibility

Open
education

Digest
&
Distill

Improve
Discovery

Agenda

- ★ Introduce the concept of a paper summary
- ★ Getting started
- ★ The journey
- ★ Miscellaneous tips and tricks
- ★ Conclusions



What it's about and what it's not about



It's not about how to become the best writer in the world or get a gazillion likes/views.



It's about how to start writing more effectively and communicate scientific knowledge that is *approachable* and *accurate*.

Getting Started

Paper Summary: The Objective

First of all, let's define it...

Write an impactful paper summary that conveys the main ideas through:

- Accurate and responsible reporting
- Technical/Scientific know-how
- Approachable and transparent writing
- Sharing Insights and Analyses
- Compelling storytelling
- ...

Where to start?

Do the
research

Identify
Paper

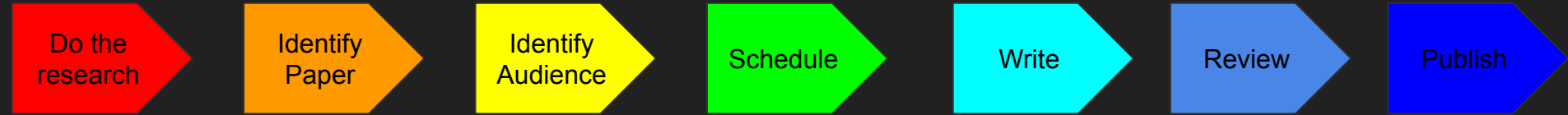
Identify
Audience

Schedule

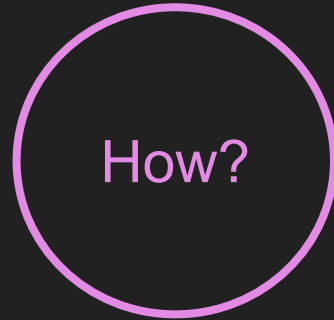
Write

Review

Publish



Important questions to address

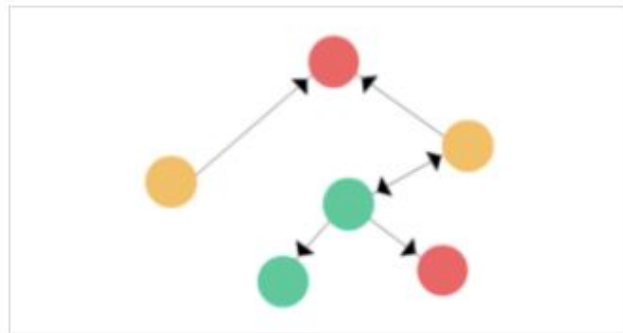


Impressive Title

- 🌟 The title is the first part of your story
- 🌟 Capture reader with a compelling title
- 🌟 Not too long, not too short
- 🌟 Don't overpromise (i.e., avoid misleading)
- 🌟 Just find the right balance with simple words that explains the content



Deep Learning for NLP: An Overview of Recent Trends



An Illustrated Guide to Graph Neural Networks

Don't forget your abstract!

This is not just any abstract!

The first few sentences should aim to summarize the journey you are about to engage the reader on:

- Objectives/Expectations: What they are expected to learn?
- The What, Why, and How, included!

Get them excited and interested! Don't mislead or overpromise!

Visuals

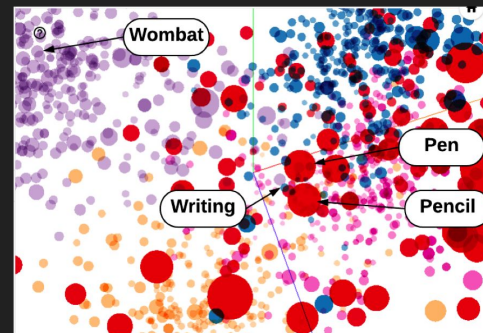
- 💎 Visuals help tell the story but choose them right
- 💎 Think about your audience first
- 💎 Avoid anthropomorphism
- 💎 Avoid inadequate/inappropriate/generic images
- 💎 Balance between fun, appealing, and professionalism



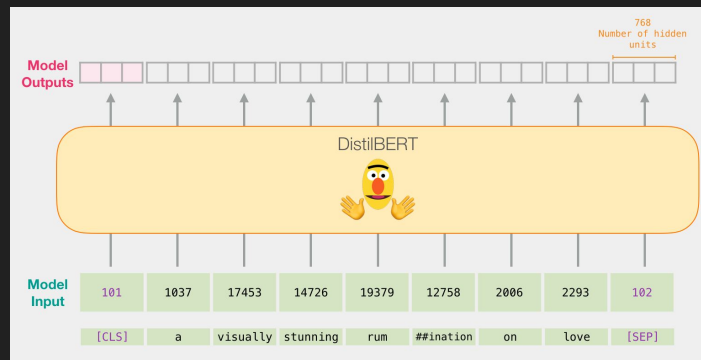
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AI



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Artificial intelligence: wat is het en ...
ptindustrielmanagement.nl



Artificial Intelligence and Machine ...
home.sophos.com



2 July 2019: Workshop on Artificial ...
effra.eu

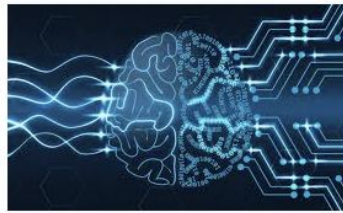


5 days ago

Realizing the Growth Potential of AI
forbes.com



How AI will improve API security ...
infoworld.com



AI in de grafische industrie | Sign+ ...
sign.nl



Wat is artificial intelligence? Een ...
obi4wan.com



public blockchain SingularityNET ...
ledgerinsights.com



How AI can address t
fintechfutures.com



How should pharma be using AI? New ...
fiercepharma.com



Artificial Intelligence (AI): neem ...
hso.com



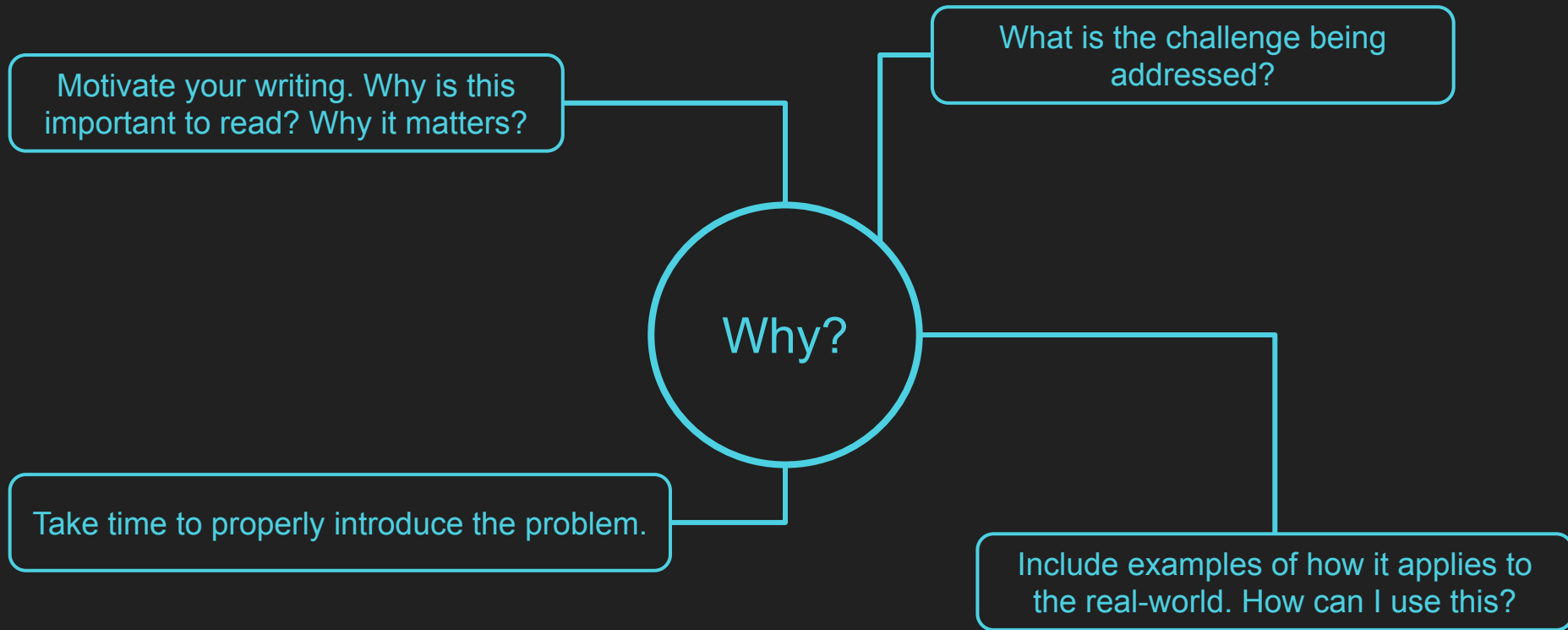
Why Does AI Fail to Deliver? - The ...
medium.com

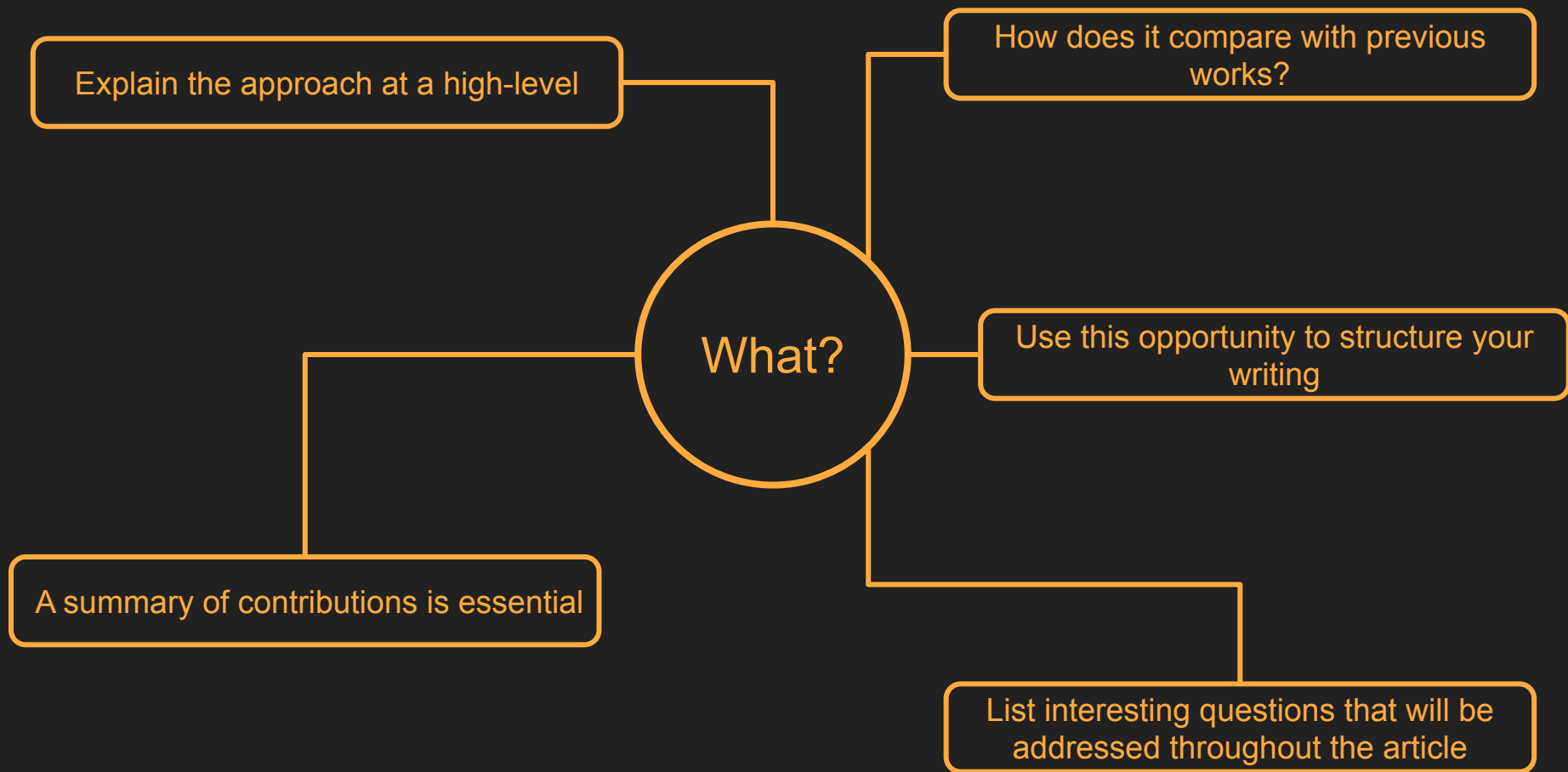


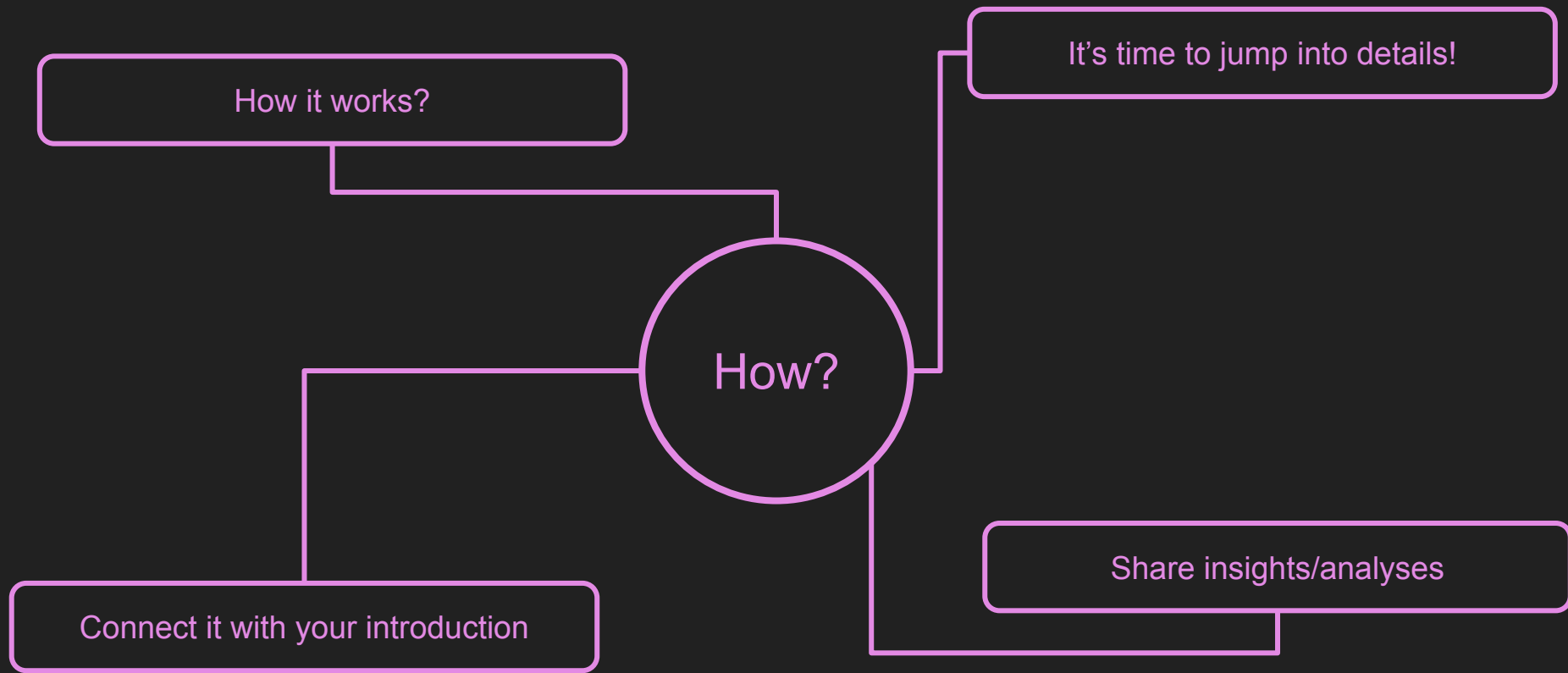
What the Terminator Teaches Us About
authority.com



The Journey







Finish with a bang!



In summary...

Future work

Call to action

References please

Tips and Tricks

Dos

- ✓ Share/Discuss insights
- ✓ Structure
- ✓ Keep it short and balanced
- ✓ Identify/Study who you are writing for
- ✓ Write to pass the “test of time”
- ✓ Set a tone and pay attention to context setting



Don'ts

- Anthropomorphism?
- Hyperbole / Speculation?
- Assumptions?
- Opinions?
- Misuse of language (e.g. “thought vectors”, “deconvolution”, “interpretability”)



About dair.ai

- More upcoming meetups (industry and academic talks)
 - Weekly paper reading sessions
 - Reach out if you have a talk or want to share your experience on any aspect of ML or NLP such as communication, advocacy, research, engineering, etc.
-
- And of course, we are [writing](#) and accepting paper summaries
 - Join us on [Slack](#)!

Happy Writing!

