

**Going beyond the hype of AI,  
understanding and unlocking AI  
potential in your organisation**

# Adam Craven

## Who am I?

- Consultancy - McKinsey, HSBC, DB, RBS, Advisory to C-Suite
- Technology + business (start-up) - 17+ years.
- Enjoy doing the deep thinking. Principles.dev - Project to help align humans (and, more recently, machines).
- Worked on AI law startup earlier this year, but decided not to move forward with it.
- Available for work - Advisory/Eng/Business leadership

# TOC

- Objectives
- Short presentation on AI
- Roundtable discussion + Questions
- Wrap up

# Objectives

## LLM focus

- Build towards sharing deeper mental models to cut through much of the hype.
- Some prepared questions that will build the knowledge towards that goal.
- Topics will cover: what has changed, stayed the same, what the hype is, regulation concerns, staffing, technologies - what you want to cover.

**Magic is what we don't understand**

**What is an LLM and how does it work?**

# Human language model

James left his house and went to the supermarket. He likes ice cream, so bought some from the shop and took it back home.

**Who likes ice cream?**

**Where did he bring it back to?**

# The concept of Attention

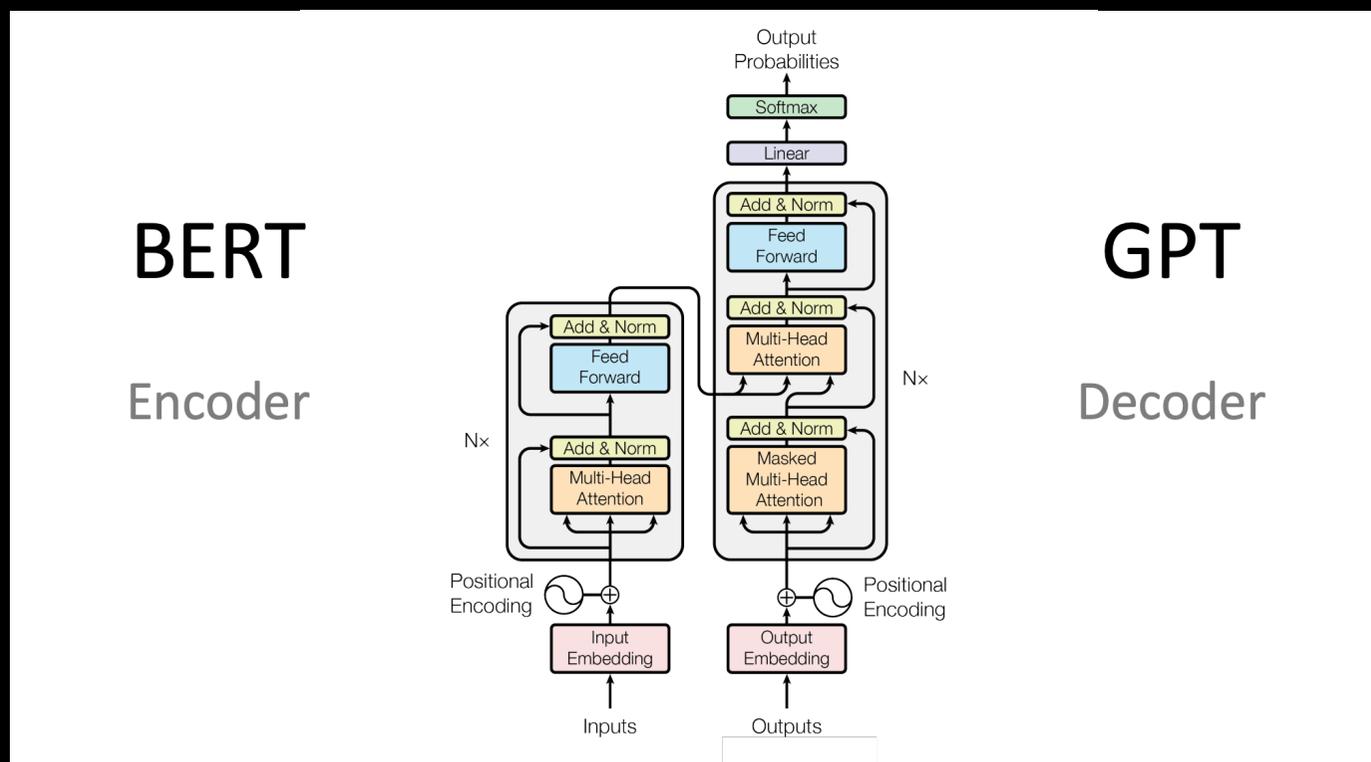
James left his house and went to the supermarket. He likes ice cream, so bought some from the shop and took it back home.



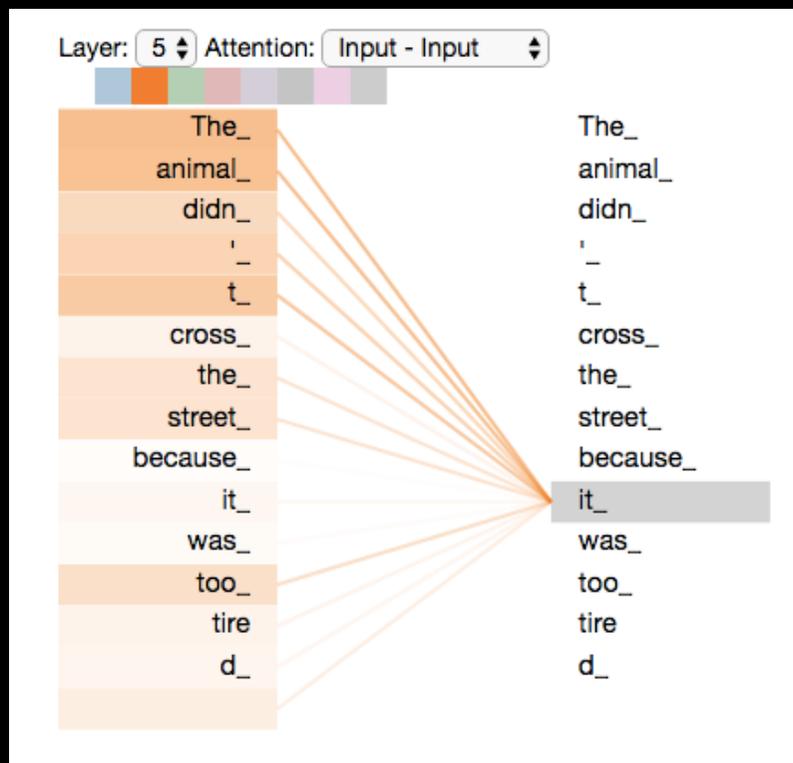
The diagram consists of four curved arrows of different colors pointing to specific parts of the sentence above. A red arrow starts above 'went to the supermarket' and points to 'left his house'. A green arrow starts above 'took it back home' and points to 'went to the supermarket'. A purple arrow starts above 'bought some from the shop' and points to 'He likes ice cream'. A blue arrow starts above 'took it back home' and points to 'bought some from the shop'.

# LLM revolution is a revolution in attention

## Transformer based architecture



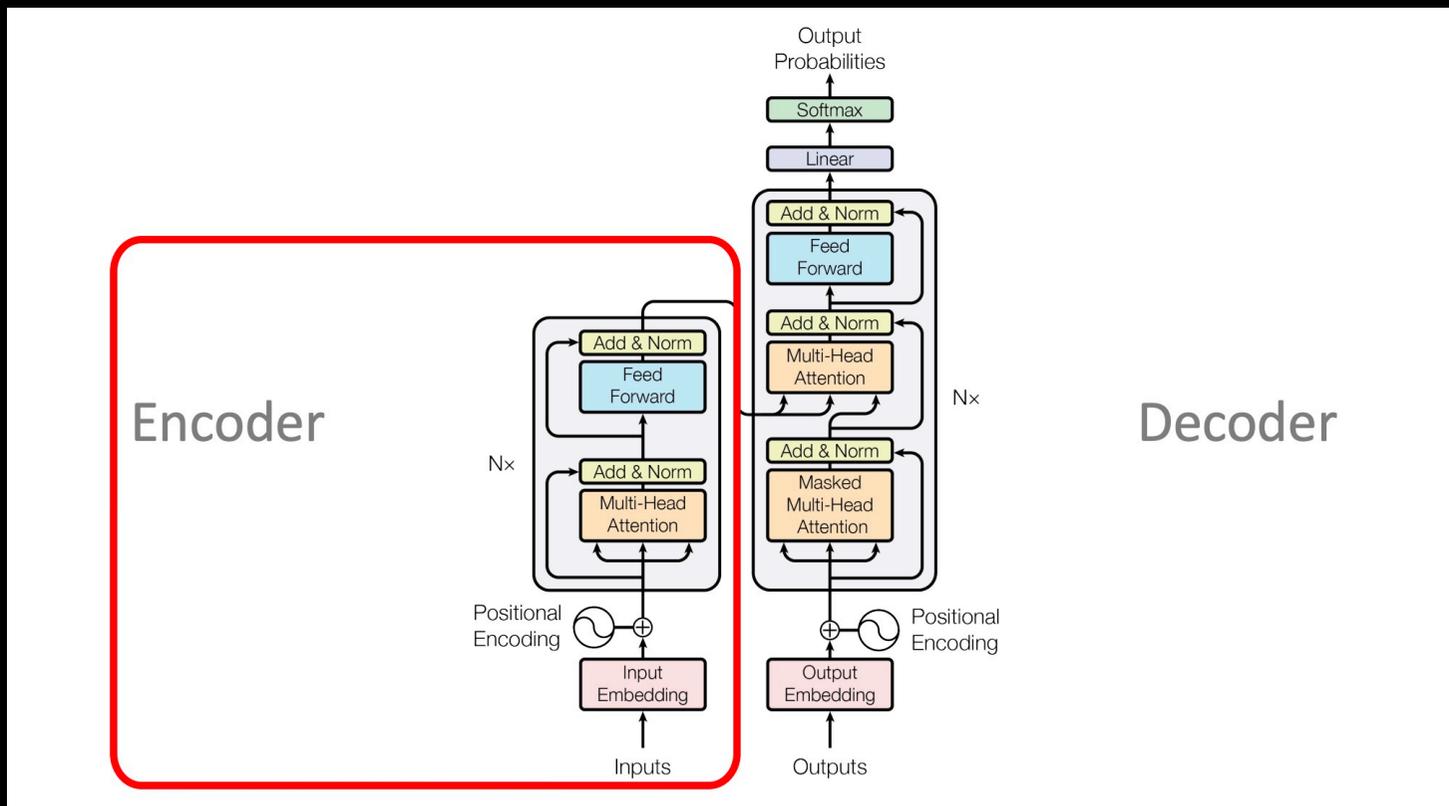
“The animal didn’t cross the street because it was too tired”



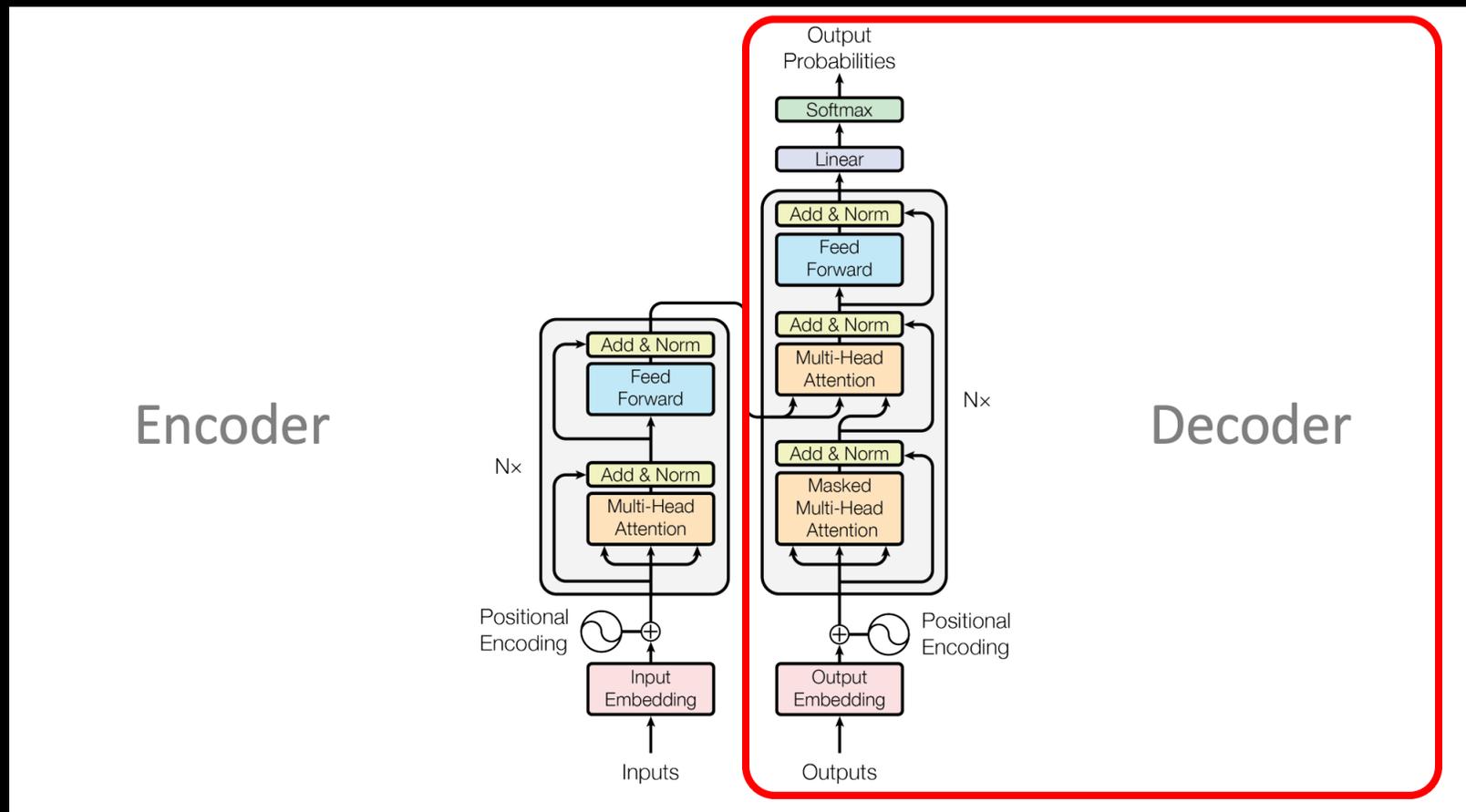
# The concept of Attention

James left his house and went to the supermarket. He likes ice cream, so bought some from the shop and took it back home.

# Transformers - Encoder



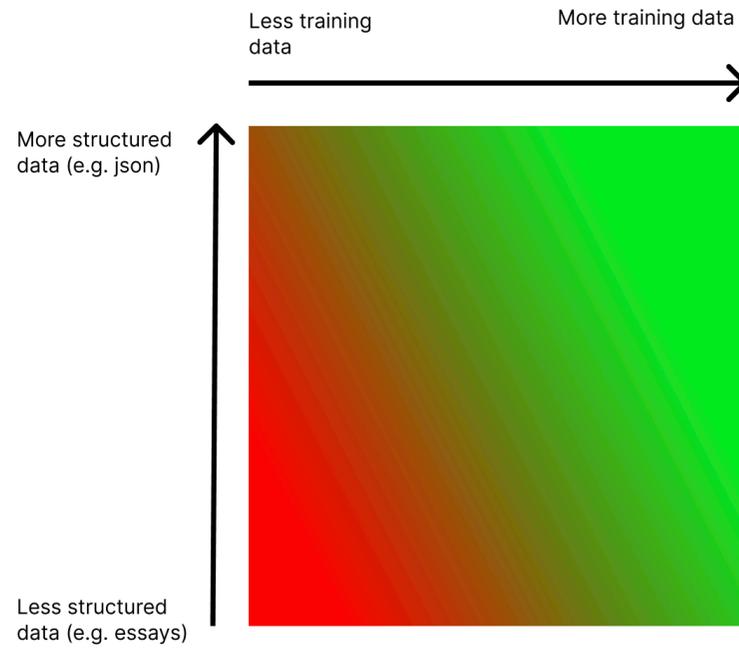
# Transformers - Decoder



**James likes ice cream**

Bias is computational efficiency

# LLM performance



# General upsides

- Translator on any data is was trained on - languages, questions, data.
- Abstraction
- Embedded data behind a natural language interface.

# If you don't know the downsides, you can't evaluate tech

- Is not a search engine! (summary engine)
- Public Illms: It's the journalist of experts - "Jpeg of the web"
- Propagate bias in training data and same thinking
- Generally increase entropy
- Decreased understanding, but more noise

# Quick poll

- Copilot
- GPT 3.5/4.0/business preview
- LLM training?
- Investing (buying or building) in LLM-based technologies outside of GPT 4.0/3.5
- Using ML in your organisation already - outside of LLMs.

**Let's begin the discussion**

**If you are interested in the  
solutions & outcomes, or  
you were there on the day  
- contact me for the full  
presentation**