

Murat Durmus

# MINDFUL AI

*Reflections  
on  
Artificial Intelligence*

(THE AI THOUGHT BOOK Reloaded)



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*REFLECTIONS ON*

*ARTIFICIAL INTELLIGENCE*

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## PREFACE

I sit in front of my notebook and try to write a preface. After all the thoughts and quotes I've written over the past few years, I'm struggling for words. Honestly, I have yet to think of writing a book about the outpourings of my neurons on the topic of AI. However, the reactions and feedback on social media and the requests of some of my friends were so positive that they finally convinced me to publish it.

Even as a young boy, I had a penchant for snippets of thoughts and quotes. I remember devouring Marcus Aurelius' "Meditations," and they still inspire me more than 20 years later. They make me think and feel like I can penetrate related topics more deeply. To me, quotes are like thought drops that sometimes penetrate deep into our souls and give us insights that a hundred books can't.

If this book inspires you or makes you look at the subject of artificial intelligence from different angles, then it has fully served its purpose and, at the same time, made me one of the happiest people in this world.

I hope you enjoy reading it and that it gives you a lot of inspiration and insights.



Be ***Mindful*** with Artificial Intelligence,  
otherwise, it will overtake you one day.

Murat Durmus –

Frankfurt am Main, October 2022

## THOUGHT & QUOTES

# ARTIFICIAL INTELLIGENCE

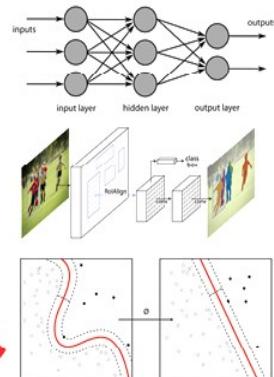
Murat Durmus  
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when you talk about AI, you usually don't mean ..

this



but rather this



Limitations:

- Extreme sensitivity to **adversarial perturbations**
- Extreme sensitivity to **any input change** not seen in the training data
- It can only make sense of **what it has seen before**

I have done a terrible thing.

I have demystified Artificial Intelligence.

Recognizing that two points of data are connected is not enough.

The System must ask  
**why** one point affects another.



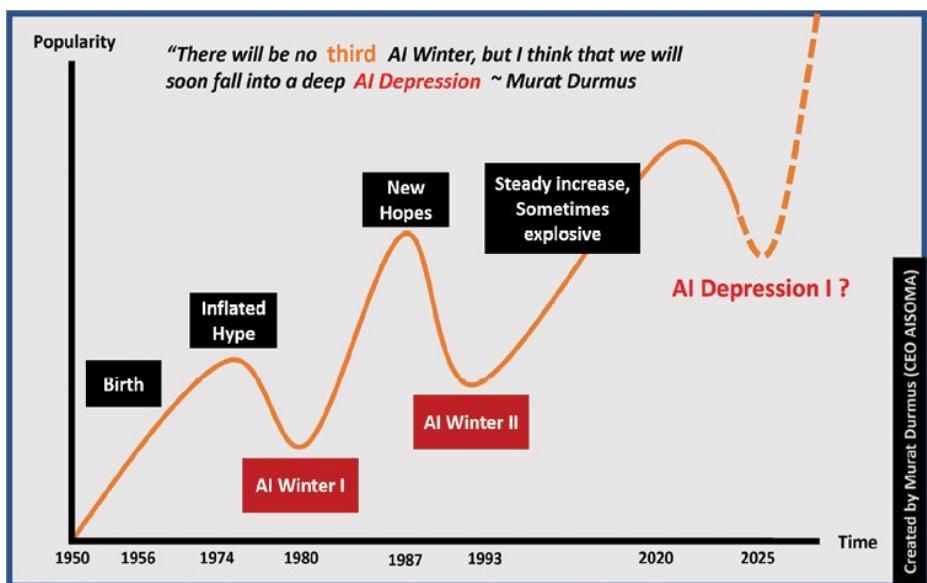
Artificial Intelligence is not a new wave of technology.

It is much more like a **Tsunami** that threatens to flood us if we are not mindful.



- AI is a branch of philosophy and not of computer science.
- AI is not a revolutionary but a transforming technology.
- We have only seen & experienced the tip of the iceberg in AI.
- AI is an accelerator of evolution.

- ▶ Many AI systems are still inefficient, need a lot of energy, or must be implemented complicatedly. We need different, more efficient approaches.
- ▶ Data awareness has not yet developed sufficiently across the world.
- ▶ Still too little usable (real-time) data is generated. The significant expansion of Edge/IoT/5G devices and infrastructures will continue.
- ▶ AI is dominated by a few Big-Techs (AI is becoming a power instrument increasingly); This could have adverse effects on AI.



The field of AI is highly ***interdisciplinary & evolutionary.*** The more AI penetrates our life and environment, the more comprehensive the points we have to consider and adapt. Technological developments are far ahead ethical & philosophical interpretations.

This fact is disturbing,



### **The AI-Control-Problem**

In my opinion, the AI Control Problem is still underestimated and receives too little attention. Only when we have found a satisfactory solution for the control problem should we allow AI to interfere fully in our lives and not before.

There is still a long way to go.



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There are biased people (politicians, managers, etc.), companies, and institutions. For some time now, more and more biased algorithms have been designed.

Both are already wreaking havoc.

We can try to convince prejudiced people to eliminate their prejudices through education and persuasion.

The algorithms can be tried with different techniques to get rid of bias.

In this sense, we have not yet achieved anything. We replace one evil with another. We urgently need clear and uniform ethical guidelines that must be put into practice. Algorithms have one advantage over people: they do not take the whole thing personally or feel offended by their egos.



## **Team Diversity**

In a world that is becoming more data-driven and algorithms are used more and more for decision-making, we need more **DIVERSITY!**

To avoid data bias, it is not only the variety of data sets that is sufficient but the diversity of the team should be expanded. More group diversity means that people with