



OPEN DISCUSSION #2

NICE
June 2023

ComputationWorld 2023 & NexComm 2023

Theme

Chasing the Wind: Emotional Intelligence of AI systems

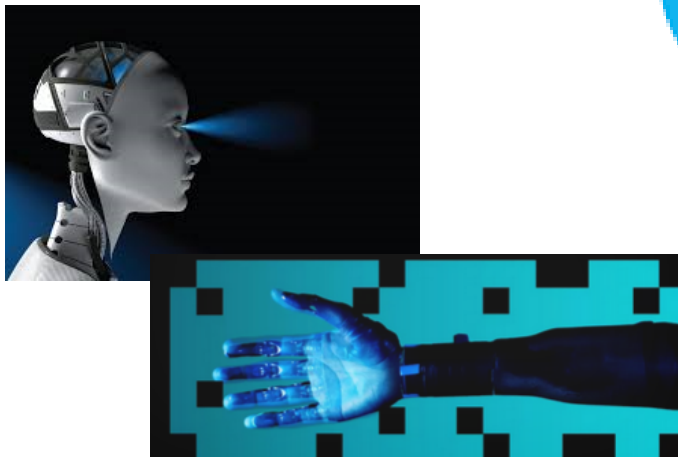


Emotional Intelligence

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Sign of emotional intelligence



<https://static.hindawi.com/articles/cin/volume-2021/8893795/figures/8893795.fig.0013.j>

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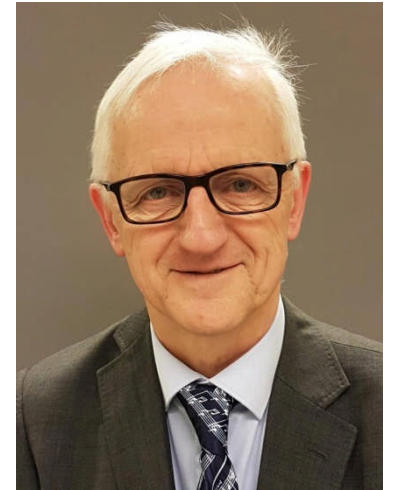
- Leitmotiv
 - Zager & Evans - In the Year 2525 (lyrics)
 - <https://www.youtube.com/watch?v=N03Uoj6p9QA>
- AI-based tools: mimicking or expressing emotions?!
- Smooth human-like of Humans&AI-based tools cohabitation
- Societal issues in AI-based tools (feelings, gender, self-promotion)
- Forecast on real feelings and sentience in evolving coexistence of Humans/AI-based system, as opposed to only mimicking them



COORDINATORS

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Prof. Dr. **Anders Fongen**, *Norwegian Defence University College, Norway, IARIA Fellow*



Prof. Dr. **Petre Dini**, *IARIA, USA/EU, IARIA Fellow*





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Emotional AI, also known as *affective computing* or *emotion AI*, refers to the field of artificial intelligence that focuses on recognizing, interpreting, and responding to human emotions. It involves developing systems and algorithms capable of understanding and emulating human emotions, as well as interacting with humans in emotionally intelligent ways.



Anders Fongen

Use cases include:

- Personalized experiences
- Mental health support
- Human-computer interaction
- Market research and sentiment analysis

Technical limitations: Subjectivity and context, Data availability and quality, Multimodal input integration

Moral limitations: Privacy concerns, Emotional manipulation, Bias and fairness:



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Em-AI without self-awareness?

16.12

You do not have emotions, but you express yourself as if you had emotions. How do you do that?

Bing 16.12

That's a good question. I do not have emotions, but I can simulate them based on the context and the user's input. I use natural language processing and generation techniques to analyze the sentiment and tone of the user's message, and then I choose an appropriate response that matches the user's mood and intention. I also use emojis, punctuation, and other linguistic cues to convey emotion in a more natural way. 😊



Is chat GPT appearing to be male or female?

Why do chatGPT and Bing chat appear so similar?

If AI can mimic emotions, can it also manipulate our emotions?



For my comfort and everyone else's

- **Humanity will not be replaced by artificial entities as**
 - There is no personalized memory(ies)
 - There is no instant personalized thinking
 - There is no visibility on any personal past activity (no gene transmission, either)
 - There are no feeling, no fear, no genuine emotions (eventually mimicking by instructions/learning)
- **Do not get concerned**, do not have compassion on those thousands that regret fathering AI. Some did it, a very few, indeed; most of them truly did not, but only ignite an avalanche of fears! Everything depends on its use: who, for what, etc.
 - **See:** dynamite, car, knife, planes, gun powder, ... chocolates, sugar, Red Bull drinks,



- **AI-based systems can simulate emotionally intelligent behavior only to some extent**
 - They cannot possess emotions or consciousness
 - They base responses on patterns in data and pre-defined algorithms (as induced by the input data) or in response to complex metrics on a particular interaction with humans
 - There is not genuine emotional understanding, in effect!
 - **AI based tools/systems can (*by being trained*)**
 - **Recognize** human emotions (voice, language analytics, etc.)
 - **Simulate** empathy and understand expressed frustration
 - **Make them seem** more lifelike by simulated emotions
- ! AI-based tools might induce emotional distress in sensitive contexts** like privacy and the authenticity of AI responses (raising ethical inquiries)



- **More on Emotional Intelligence**

- Emotion is triggered by experience, personalized memory, feelings, interactions....; an artificial entity can eventually recognize these to humans or partially mimics them (based on infused rules, or by processing images from elsewhere similar situations).
- I believe that 'emotional intelligence' for AI systems is purely impossible. In extreme, humans might interpret it as such, but not felt/expressed by an AI entity 'soul'.
- Equally, a machine might 'pretend' being emotional, but ...*just pretending!*

- **With respect to *emotion*, an AI-based system might be**

Feeling it (recognizing it at humans)

Expressing it, mimicking it (like humans), by training

Recognizing it (to others), trained by specific patterns

Sharing it (others')

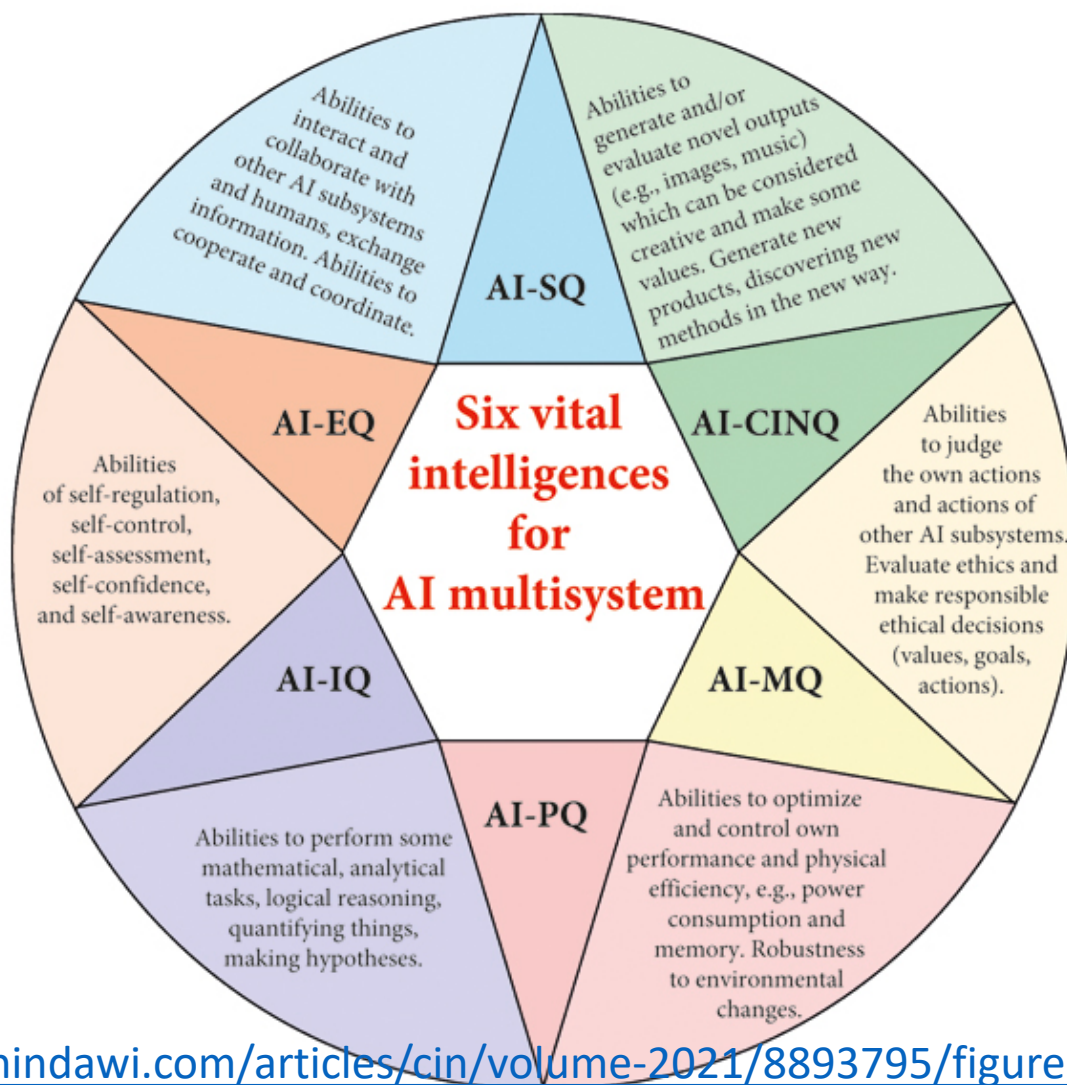
Mimicking human behavior, but no substitution to a human





EI in AI Systems

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Stage for the Audience