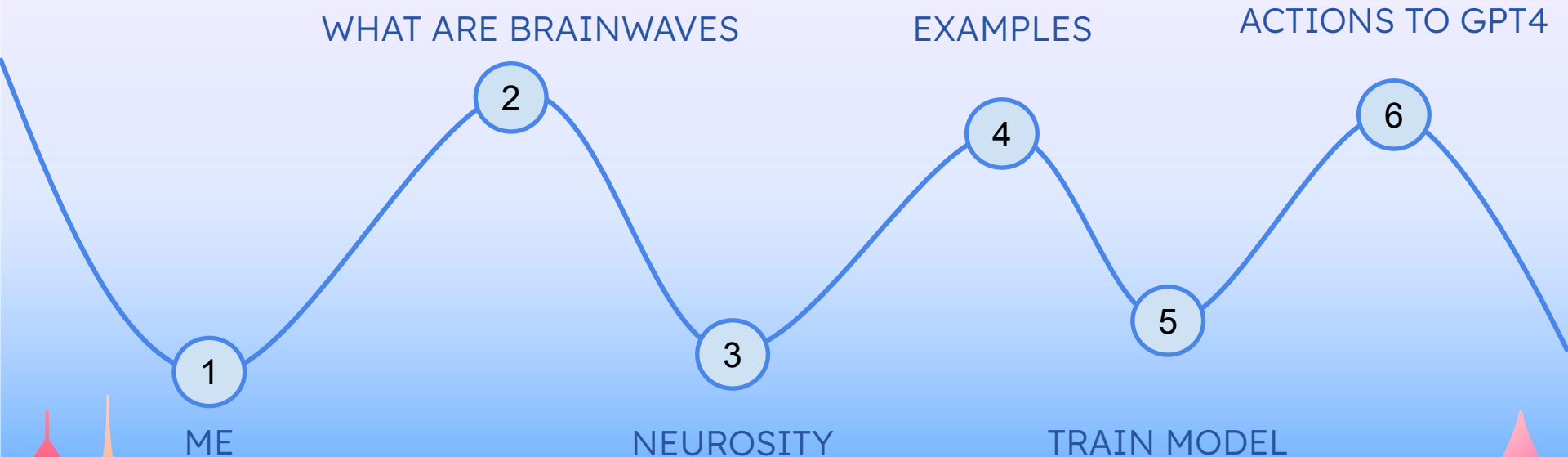


Hackeando los Pensamientos

**Traduciendo Señales Eléctricas
del Cerebro en Acciones a
través de Modelos LLM.**

Adonai Vera – ML Engineer Subterra AI

Topics



Topics

GPT4 TO AUDIO

7

CONCLUSIONS

9

8

REAL TIME DEMO

10

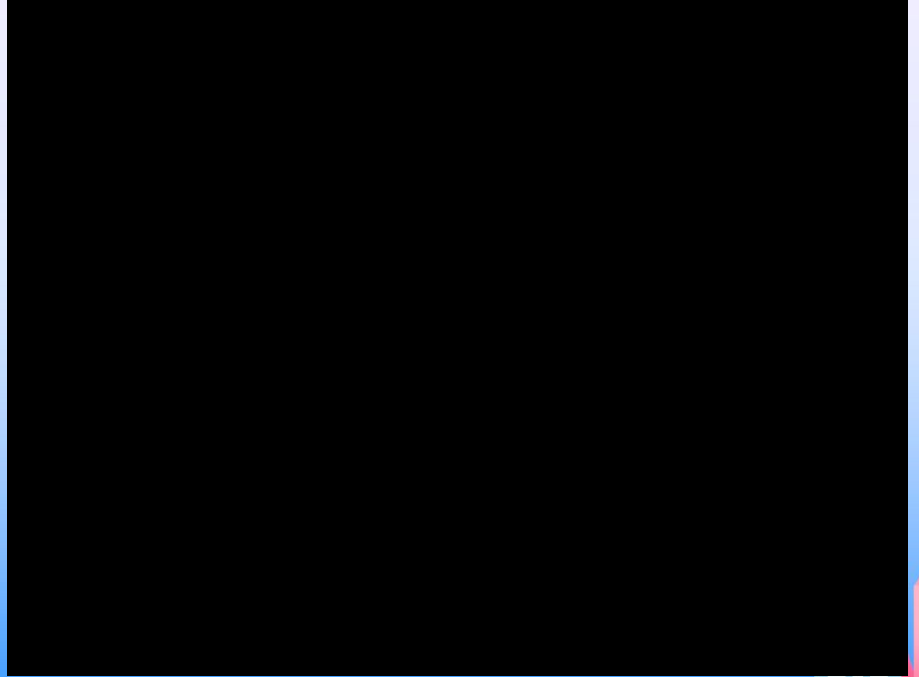
NEXT STEPS

PyCon US • 24

By the community, for the community

Why Artificial Intelligence

“My personal story”



**My purpose is to make the
technology easier to use,
accessible and with good quality
to anybody** 💡 🚀



Hugging Face



DeepLearning.AI

subterra™



correlation.one
DATA SCIENCE FOR ALL™



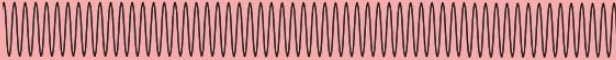




I'm Adonai Vera. A Machine Learning Engineer based in Colombia 🇨🇴

I have been a software developer, AI developer, AI Leader, and CTO in different companies which has given me a vision of creating AI products with a customer focus 🌐 Besides, I'm one of the 10 TensorFlow certified Developers for Google in Colombia, author of courses as "Curso Profesional de Redes neuronal con TensorFlow", and "Curso Profesional de computer vision con TensorFlow" in Platzi and winner of the hackathon Covid19 and Innovate2019 with Ecopetrol Colombia 🌟 ...

On this site we explore the strategies and tools that help us live happier, healthier, more productive lives 🚀

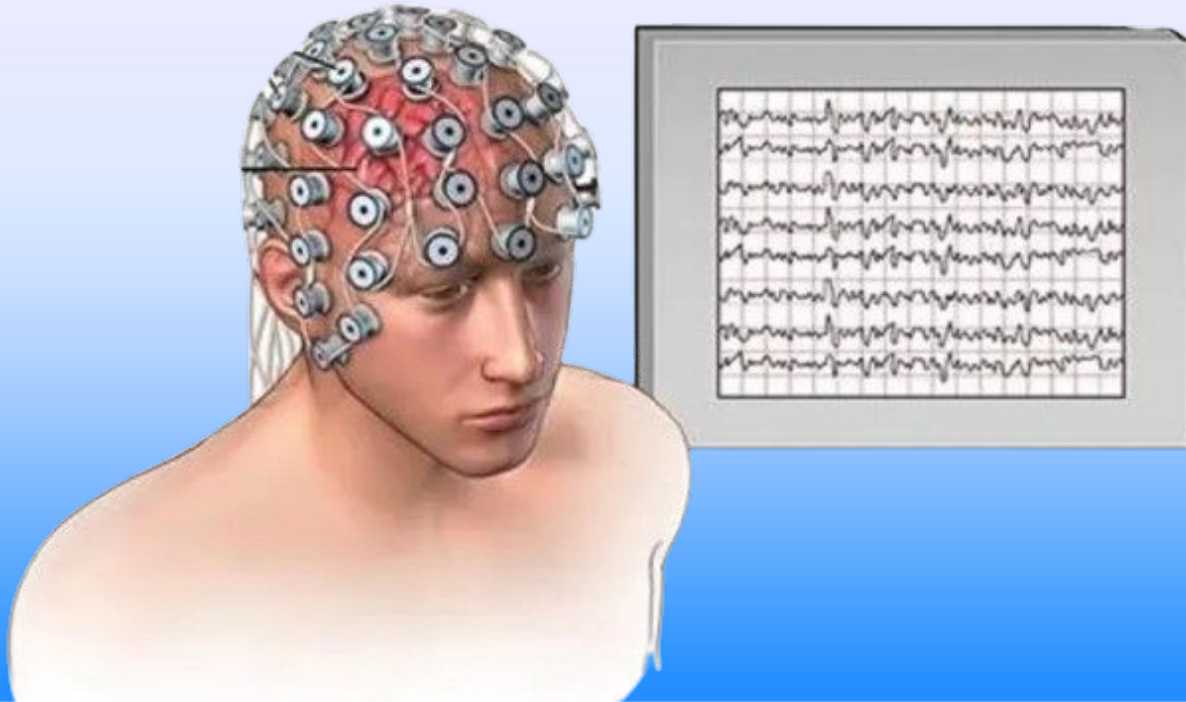
What are Brainwaves

“Electrical impulses“

Gamma Waves 30 - 100 HZ		INSIGHT PEAK EXPERIENCES SYNCHRONIZATION
Beta Waves 12 - 30 HZ		ALERTNESS CONCENTRATION THINKING
Alpha Waves 8 - 12 HZ		MEDITATION CREATIVITY RELAXATION
Theta Waves 4 - 8 HZ		VISUALIZATION TRANCE DREAMING
Delta Waves 0.5 - 4 HZ		DEEP SLEEP TRANSCENDENCE RESTORATION

History of the EEG

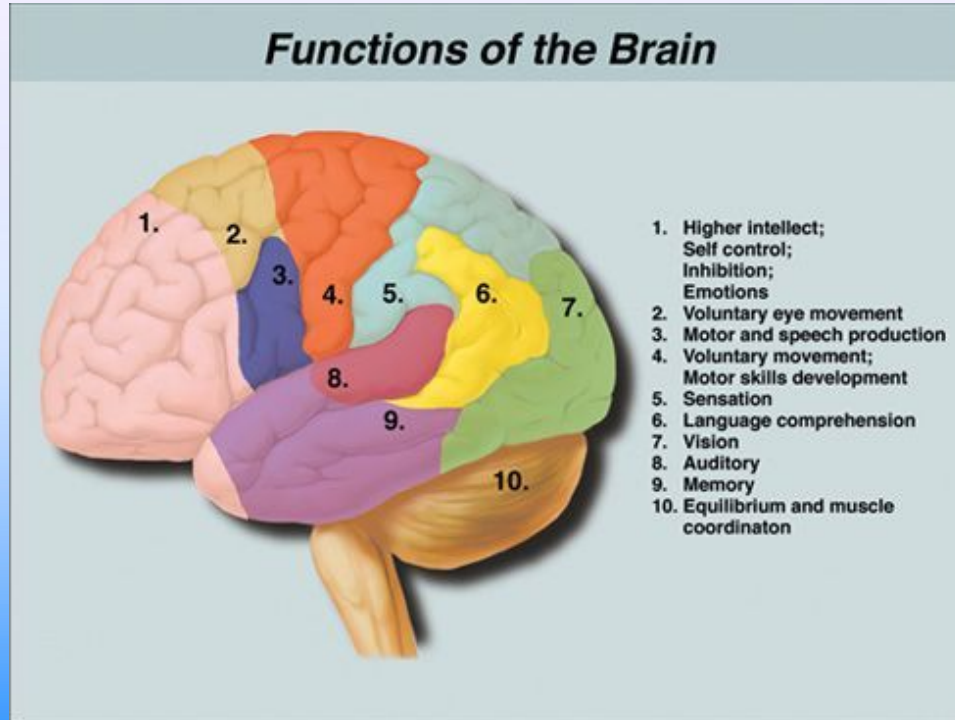
“Electroencefalografía (EEG)”



History of the EEG



“Electroencefalografía (EEG)”





Neurocity

“Electroencefalografía (EEG)”



Interesting Facts




Quad-core 1.8 GHz CPU. 8 active EEG sensors.

Near-field Communication (NFC). Privacy and Security Crown -> 256Hz

Examples

“Neurocity”



 NEUROCITY | MUSIC  Adonal Vera 

I want to focus for 1 hour ▾ while I code ▾

Start with music from my top tracks ▾

Start Session

Examples

“Electroencefalografía (EEG)”



Examples

“Electroencefalografía (EEG)”



Examples

“Education”



EMOTIV



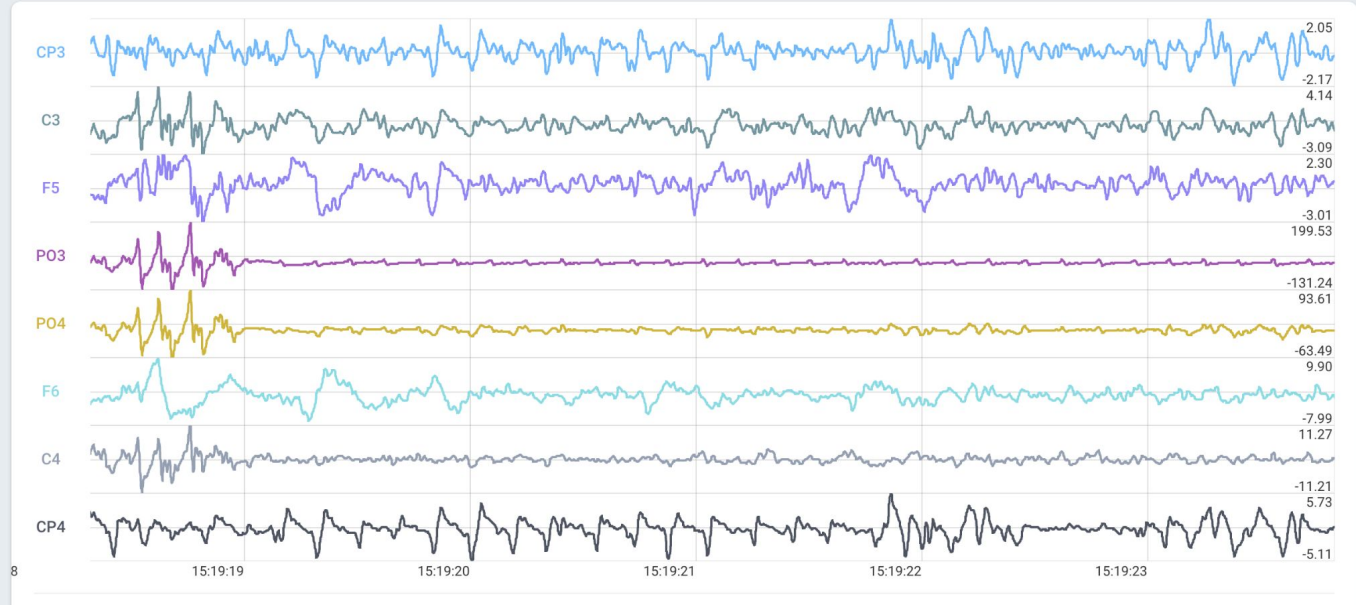
Examples

“Propheticai - The Halo ”



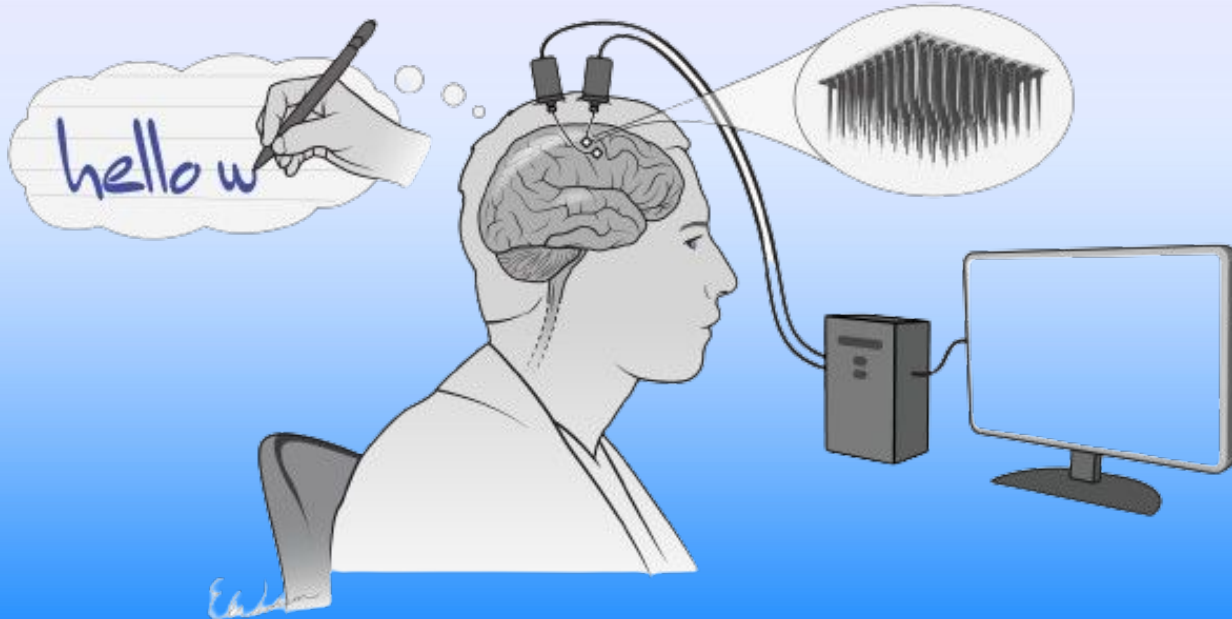
Pizza Example of Actions

Brainwaves



Brain-Computer Interfaces (BCI)

Neurofeedback is a form of biofeedback that leverages developments in BCIs and neuroscience



Brain-Computer Interfaces (BCI)

Neurofeedback is a form of biofeedback that leverages developments in BCIs and neuroscience

WHAT IS BEHAVIORISM?

The theory that psychology can be objectively studied through observable action.

Operant Conditioning

Subject learns behavior by associating it with consequences.



Classical Conditioning

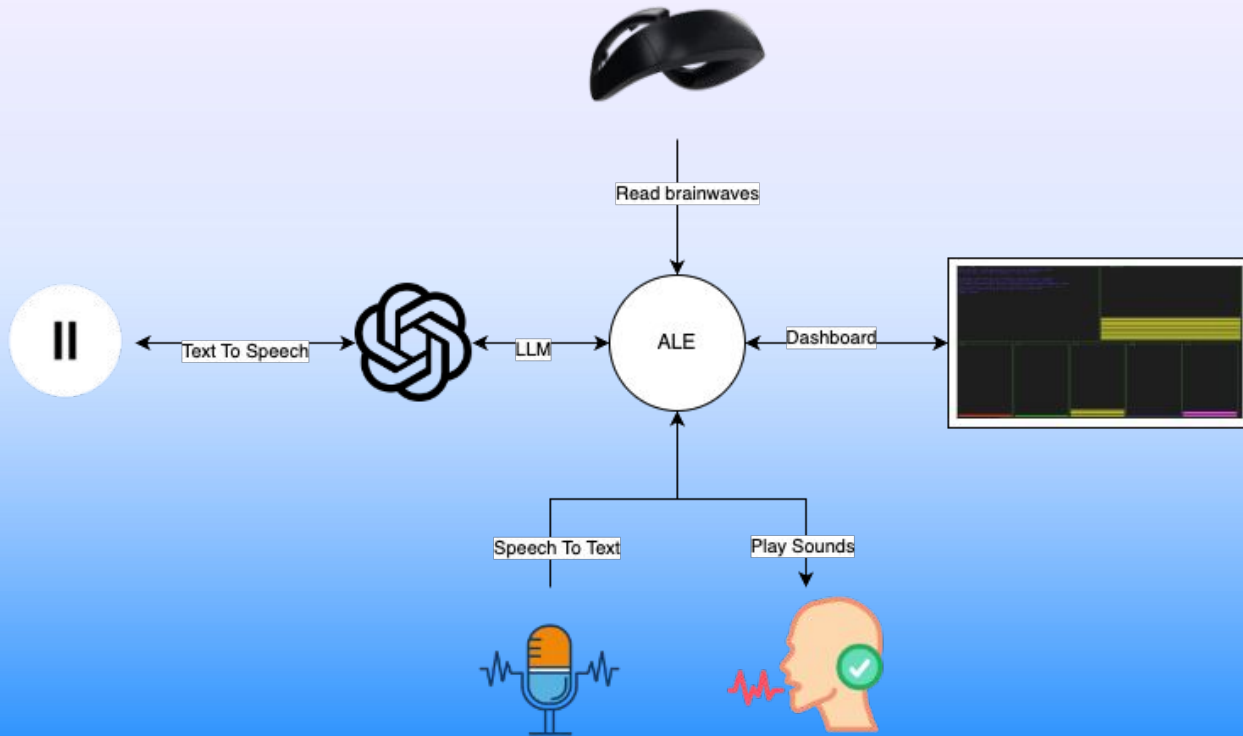
Subject learns to associate two unrelated stimuli with each other.



ThoughtCo.

I created ALE 🌐

Attention Level Enhancement: This name emphasizes the system's ability to enhance and monitor attention levels during meditation.



Let's code 🌐



Where do I start?

- Be part of the community.
- Try to be in a research team.
- Learn with projects.
- Share experiences.
- Register to daily tools as TECLA or Paper with Code Newsletter.
- Use AI tools.

I don't know anything about AI

www.adonaivera.com



How can we take action to reduce barriers to accessing artificial intelligence and make it more accessible to everyone? 💡 🚀