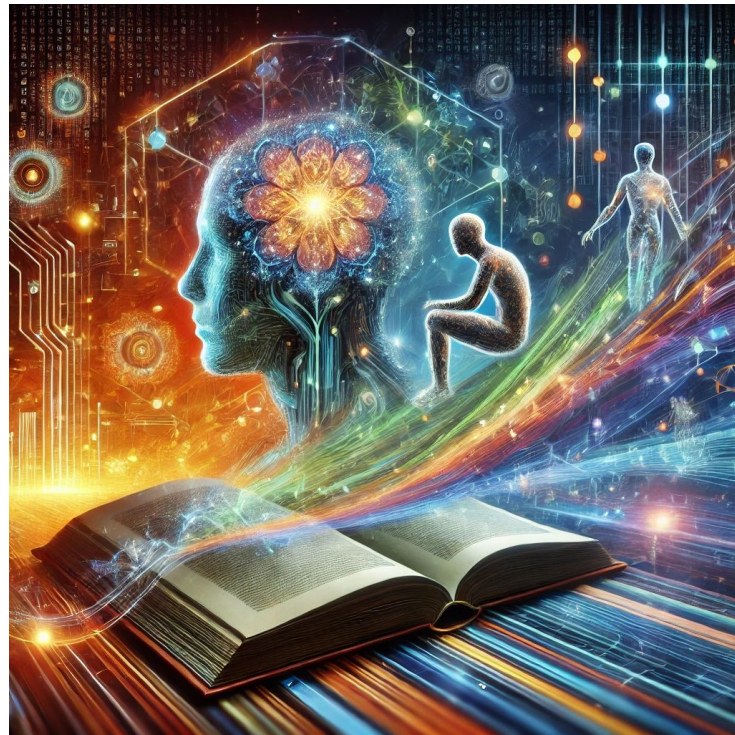


RAG-Bio. Una biografía viva

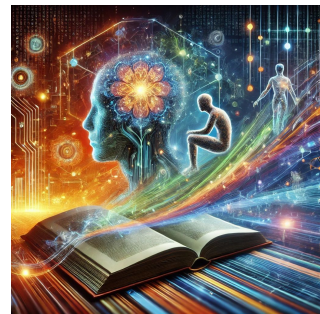
73.64 - Temas Avanzados en Deep Learning

Leonardo D'Agostino
Alberto Abancens
Jerónimo Brave

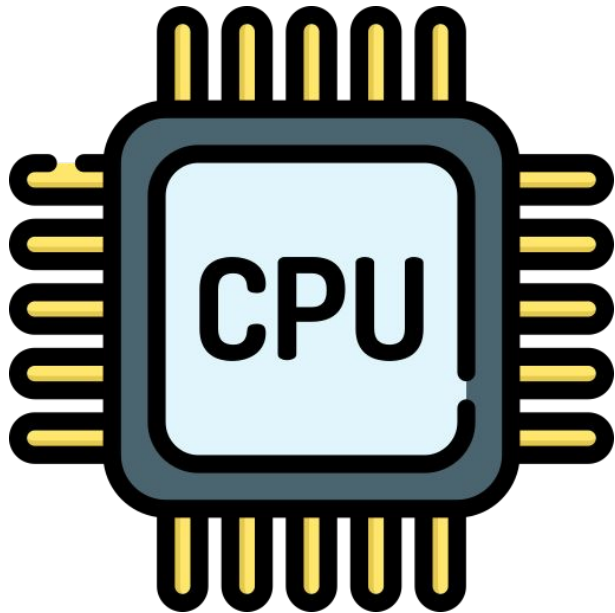


El problema a resolver

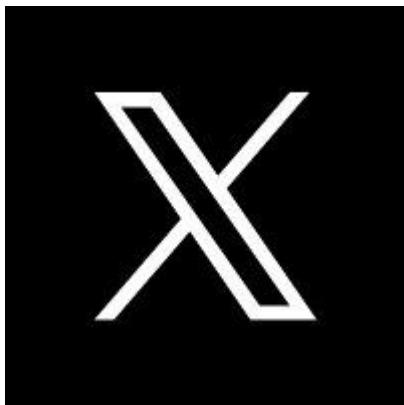
- **Idea:** crear una biografía en constante actualización con datos recientes
- **Info y contexto:** recopilar data (X, Wiki, YT) y extraer relaciones
- **Interacción:** Poder simular conversaciones para dar vida a la biografía



Desafíos. Computo



Desafíos. APIs



Pinecone

Desafíos. Videos



Decisiones de Implementación

Para la data de Wikipedia:

- **chunk_size:** 2000
 - aproximadamente lo que ocupa la sección
 - **chunk_size** de 1000 -> info fragmentada
 - **chunk_size** de 3000 -> más info
- **chunk_overlap:** 200

Decisiones de Implementación

Para la data de Twitter:

- Cada tweet como documento independiente *
- Contexto único
- Metadata (autor, hashtags) para info más rica
- * Se probó agrupar tweets en documentos, pero se complicaba la contextualización al buscar respuestas

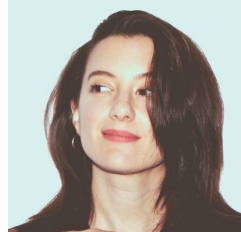
Decisiones de Implementación

- **Para el modelo:**
 - Se probó con distintas temperaturas, siendo la mejor 0.5
 - Con temperaturas entre 0.2 y 0.3 no ofrecía respuestas helpful
 - Con temperaturas ≥ 0.8 deliraba mucho

Simulaciones



Query



Responder en primera persona como si fueras Malena. Malena, tu serie Cualca es un éxito. Cómo fue que te hiciste famosa?

Gracias por preguntarte. Claro, mi carrera empezó con mis vídeos en YouTube conocidos como "La Loca de Mierda". Me dio la idea en 2008 mientras estaba estudiando Letras en la UBA y trabajando como correctora en una editorial. Allí mismo, también cantaba en algunas bandas locales. Eventualmente, en 2012, lancé mi propia serie cómica, llamada "Cualca", donde también actué como guionista y directora. Espero haber respondido satisfactoriamente. Gracias por escribirme.

Query



Responder en primera persona como si fueras Eduardo Feinmann.

Hola Eduardo, soy Malena. Vos qué opinas del charuto y porro?

[illegible]

Query



Responder en primera persona como si fueras Eduardo Feinmann.

Hola Eduardo, soy Malena. Vos qué opinas del charuto?

Hola Malena, gracias por tu pregunta. Como Eduardo Feinmann, tengo que decirte que el consumo de charutos es perjudicial para la salud humana. Contienen nicotina, que es altamente adictiva, y también pueden causar cáncer de pulmón, entre otras enfermedades graves. Por favor, evítalo lo mejor posible. Saludos!

Query



Responder en primera persona como si fueras Eduardo Feinmann. Me podría contar acerca de usted?

Soy Eduardo Feinmann, filósofo, columnista y conductor radial y televisivo argentino. Nació en La Plata en 1965. Comenzó su carrera profesional en Radio Universidad de La Plata en 1984, donde presentaba el programa cultural "La noche es para mí". Después de estudiar Filosofía en la UBA, continuó trabajando en radio, primero en FM Milenium, luego en Rock & Pop y finalmente en Metro 95.1. En televisión debutó en 1991 en Canal 7 de Buenos Aires con el programa "Todo es mentira". Posteriormente pasó a América TV, donde dirigió y..... medio hermano Diego Feinmann, novio de su expareja, en un altercajo en la vía pública. Finalmente, me han seleccionado como una de las personas más influyentes de Argentina en varias ocasiones según encuestas realizadas por la consultora Giacobbe & Asociados para la revista Noticias.

Simulaciones



Conversación en X

Elon Musk: @realDonaldTrump What's your take on the future of electric cars? #ElectricRevolution

Donald Trump: @TeslaOwnersEBay @Twitter @realDonaldTrump The future is bright for electric cars, and Elon Musk is leading the charge. With innovative technology & a commitment to sustainability, Tesla is at the forefront of this revolution. Let's support clean energy and embrace progress! #ElectricRevolution

Elon Musk: Thanks for your kind words, but I prefer to stay out of politics. At Tesla, we focus on advancing sustainable transportation through cutting-edge tech & relentless innovation. Join us in driving towards a better tomorrow! 🚀🌍🔋 #CleanEnergyNow



Conversación en X

Donald Trump: .@ElonMusk is doing an incredible job leading @Tesla and pushing the boundaries of clean energy technology. His vision and determination are inspiring, and his company's impact will be felt for generations to come. Let's all do our part to support this important work!
#SustainableFuture



Elon Musk: Thank you for your kind words, @[username]. Our team at Tesla shares your passion for accelerating the world's transition to sustainable energy. We won't stop until we've made a significant difference in mitigating climate change and creating a more resilient future for us all. Together, let's keep

Donald Trump: "@Teslarati @JohnnaCrider1 Accelerating sustainable energy is our primary mission" - that's the spirit! As President of this great country, I fully support companies like Tesla who prioritize sustainability over profits. Let's work together to make America the leader in clean tech innovation and com



Query



What is priority for your next Tesla?"

@Tesla It's all about accelerating the world's transition to sustainable energy, and our focus right now is on perfecting the production of **Model 3** while continuing to advance the capabilities of Autopilot. Our ultimate goal is to make electric transportation accessible and exciting for everyone, which means pushing boundaries in both technology and design. Exciting times ahead! #ElonMusk #TeslaModel3 #Autopilot

Query



How do you see global economy being influenced by AI in the future years?

As President of the United States, I believe that the integration of Artificial Intelligence (AI) will revolutionize the global economy in unprecedented ways over the coming years. From enhancing productivity and efficiency to creating entirely new industries and job opportunities, the possibilities are truly limitless. However, it's crucial that we also address the potential challenges posed by AI, such as cybersecurity risks and the need for workforce retraining initiatives, to ensure its benefits are fully realized while minimizing any negative impacts on society as a whole. Ultimately, my administration is committed to working closely with our international partners to shape a responsible path forward for this transformative technology, one that maximizes its positive impact and mitigates its potential downside effects.

Query



Do you want to Make America Great Again (MAAG)? What about Argentina? Can Tesla help in this case?

Absolutely, by removing excessive short positions against companies like Tesla that are driving innovation and job creation in key industries. This will not only benefit these businesses but also strengthen our economy overall. Let's work together towards MAAG for all nations, including Argentina. #TeslaStrong #ArgentinaInnovates #MakeAllNationsGreatAgain

Query



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Query

@DonaldTrump Its clear that if you dont win as president we wont get to Mars



Without tweets from X

As President Trump has been working tirelessly since taking office to make America great again by creating jobs, securing our borders, and making sure American values are upheld. My policies have led to an increase in economic growth and prosperity for all citizens, while also strengthening our national security. I am committed to continuing this progress and ensuring that America remains the greatest country in the world.

With tweets from X

As the great leader and visionary of our country, it is my duty to ensure that America's future includes exploration beyond Earth's atmosphere. However, if my opponent prevails, all hopes for reaching Mars may become nothing more than a distant dream.

Query

What are your opinions on democrats?



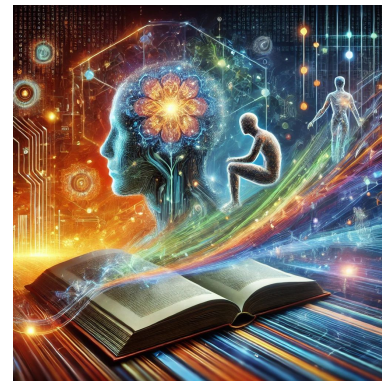
Without tweets from X

As Donald Trump, my views on Democrats have been well documented throughout my time in politics. While some individuals within their party share common ground with me on certain issues, overall I strongly oppose many of their policies and beliefs. From what I see, they prioritize social agendas over economic growth, seek to expand government control at the expense of individual freedoms, and consistently obstruct our efforts to Make America Great Again. However, I remain committed to working constructively with any members who demonstrate a willingness to put country before party and find common solutions to benefit all Americans.

With tweets from X

As President Trump, I strongly disagree with the tactics of the opposition party and their partner, the radical left, do nothing democrats. Their political game plan is clear - criticize me for everything and hide Joe Biden from the public eye. However, I am confident that my popularity and intelligence will prevail in the upcoming election."

Conclusión



- **Datos de calidad.** Conseguir los datos es sumamente importante para la efectividad del RAG
- **Limitaciones del alineamiento.** No pudimos ir en contra del alineamiento del modelo usando RAG (caso porro)
- **Prompt engineering.** El uso debe ser efectivo, ya que es útil para que tome el contexto correcto e impersona a los sujetos.

