

CODE
FREEZE

LBEEZE

Generative AI *FUD to Master*

Workshop Exercise: <https://github.com/wiltjk/CodeFreeze2024.git>

GenAI

Exciting
or
Frightening?



Tradition AI (we trust) vs. GenAI (we fear)



Which is a Dog?



Create an image depicting a car tire falling in love and eloping with a wagon wheel.



The Paul MacGrayne Test

What's a half of two thirds?

How does Artificial Intelligence (AI) Learn?

Supervised



Unsupervised



LLM < GenAI = ANI << Hype < AGI << ASI

- **Artificial Narrow Intelligence** can only perform specific tasks that are bound within a limited (narrow) domain.
 - **Generative AI** refers to AI systems that can generate content from patterns – mimics human intelligence, but *it's not*.
 - **Large Language Models** are specifically designed to understand, interpret, and generate human language.
- **Artificial General Intelligence*** represents AI with the ability to understand, learn, and apply intelligence across a wide range of tasks, at a level comparable to human intelligence.
- **Artificial Super Intelligence*** is when the machine is orders-of-magnitude beyond that of a single human and domains span the human catalog of knowledge plus.

**While 15-50 years away, these are what we currently (and should) fear.*

So, Why all the FUD?

Fear Uncertainty Deception

- **Misinformation, Disinformation & Hallucinations** – their ability to generate highly convincing text and content that may be false.
- **Automation & Job Displacement** – they raise fears of widespread job displacement as they automate tasks previously performed by humans.
- **Bias & Discrimination** – they can inadvertently learn and perpetuate biases present in their training data.
- **Loss of Agency and Control** – as they become increasingly sophisticated, their ability to learn and adapt raises concerns about losing control over them.

The [*unfortunate*] Result

Dear Employees,

Out of an abundance of caution, we are restricting the use of generative AI tools such as ChatGPT, DALL-E, Bing AI, Google Bard, Anthropic Claude, etc. until we can evaluate their impact and exposure of our sensitive corporate data, information, and assets.

Once these tools have adequate safeguards to protect our sensitive information, adhere to corporate policy, and satisfy our senior leadership team (CISO & Legal), we will provide necessary guidance on their use.

Your Corporate Leadership



Delayed Adoption of an *Emerging Technology* out of *an abundance of caution* may have worked for...

- The Personal Computer (50M users in about 15 years)
- The Internet (50M users in about 5 years)
- The Cloud (50M users in about 10 years)

... but it won't for Generative AI (100M users in 2 months)



Beware the Carpetbaggers
& Elixir Sales People

Create your own

Masters of GenAI

You'll need a *Strategy*



The plan to safely leverage GenAI must be...

- **Simple** (Gall's Law)
- **Effective**
- **Timely**

Tiger Team Led Innovation

Form a 3-6 person tiger-team – a group of “***believers***” with a strong drive, who are trusted by leadership to be responsible in their execution.

This team should not default to any traditional AI/ML resources. Pick from those who are willing to become ***Masters***.

Unblock this team from interruptions & distractions — consider having them temporarily report to an executive leader (e.g., CTO).

This allows the team to be 100% focused on short-term deliverables.

Learn about GenAI by *using* GenAI (safely)

- Your Tiger Team ensures Safety.
- Leverage *all* GenAI platforms to learn which work where.
- Understand the costs for each platform.
- Learn how others are using GenAI to purposefully apply it.
- Learn *Prompt Engineering*.

AI Wrapper UX Mockup

Prompt: Explain Quantum Entanglement

Screen input verified for policy adherence

✓ Passed Policy
✓ Logged

Response:

Output from multiple platforms & variations

Bing AI Bard ChatGPT A ChatGPT B ChatGPT C ChatGPT D

Quantum entanglement is a phenomenon in which two or more particles become linked together in such a way that the quantum state of each particle cannot be described independently of the others, even when the particles are separated by a large distance. This means that the particles can be entangled in such a way that measuring the state of one particle will instantly affect the state of the other, regardless of the distance between them. This phenomenon is a consequence of the wave-like nature of quantum particles, and has been used to develop powerful quantum computing and communication technologies.

Eventually rate generated output confidence

✓ High Confidence

User provided accuracy and applicability feedback

Please rate this Response: Accurate Helpful


Prioritize Research Results → Applied Augmentation

- **Code Generation** (30-50% increased productivity)
 - Understand & explain code
 - Write & clean-up code
 - Convert code
- **Decision Support via Insight Platforms**
 - C-Suite Augmentation for Operational Excellence
 - Focusing on Art-of-the-Possible
 - Correlate Internal Data against External Influences
- **Health Device Health** via IoT measurements & patterns
 - Listen for anomalies
 - Predict behaviors

Build your own GenAI



Many Tools and APIs... use the 80/20 rule



Public to

☒ Only me

☐ Anyone with a link

☐ Public

Confirm

Name

Krispy Insights

Description

Professional insights on Krispy Kreme

Instructions

Krispy Insights is designed to provide insights about Krispy Kreme, focusing on the company's financials, business attributes, and related information, leveraging sources like the official Krispy Kreme website and reputable pages like Wikipedia. It prioritizes these topics in its responses. When responding, it starts with a concise summary followed by in-depth explanations. Krispy Insights makes best-guess responses to vague questions using available information and maintains a professional tone, catering to users seeking detailed information on Krispy Kreme's business and financial aspects.

Conversation starters

Tell me about Krispy Kreme's recent financial performance.


What are the latest business strategies of Krispy Kreme?

How is Krispy Kreme positioned in the market?

What's new at Krispy Kreme?

Knowledge

If you upload files under Knowledge, conversations with your GPT may include file contents. Files can be downloaded when Code Interpreter is enabled

 Krispy Kreme 2023.pdf
PDF

Upload files

Capabilities

☒ Web Browsing

☒ DALL·E Image Generation

☐ Code Interpreter



Generative AI

Generative AI is premium feature and can be enabled or managed by your administrators. [See pricing tiers](#)

Public websites & Sharepoint sources


Enter your website

Add

Websites	Data source
 https://en.m.wikipedia.org/wiki/Krispy_Kreme	Public website
 https://www.krispykreme.com/	Public website


Upload a document (preview)


Upload a document to power real-time responses to users. The document will be stored securely and used as the data source for automatic responses. Recommend using text-based files. Please note that image, audio, video, and executable files are not supported. [Learn more](#)

 File contents available to all users. Uploaded file content is available to anyone chatting with the copilot, regardless of file permissions or access controls.

Drag and drop files here or [click to browse](#)

Up to 3 MB per file

 File upload complete. Files have been successfully uploaded to Dataverse. They will be available for generative answers shortly

Name	Size
 dnut-20230101.PDF	3.08 MB



Workshop Exercise

- <https://github.com/wiltjk/CodeFreeze2024.git>
- Please evaluate my code. Find any errors. Rewrite it to be without error.
- This code is to demonstrate how GenAI can optimize code. So, please rewrite it to be super fast and concise.



Remember, *the Tractor didn't replace the Farmer,*
however,
Farmers with tractors did replace those without.

References

- [Generative AI \(GenAI\) – A Primer](#)
- [The Tractor, Farmer, and Generative AI](#)
- [Outmaneuvering AI: Cultivating Skills That Make Algorithms Scratch Their Head](#)