* Artificial Intelligence: Simulates human intelligence via algorithms/training
  + Week AI (narrow AI): specific domain (language translators, virtual assistants, AI powered web searches, recommendation engines etc.)
  + Strong AI (generalized AI): AI with diverse capabilities across unrelated tasks + can acquire new skills to face new challenges
  + Super AI (conscious AI): AI with human level consciousness, requiring self-awareness
* Learning
  + Supervised Learning
  + Unsupervised Learning
  + Reinforcement Learning
* Intelligence
  + Human
  + Artificial (machines to perform tasks that requires human intelligence – replaces human involvement)
  + Augmented (machines & humans working side by side – machines giving super abilities to humans / compliments humans abilities)
* Human’s vs machines
  + Humans: generalization, creativity, emotional intelligence
  + Machines: ingesting data, repetitive tasks, accurate
  + Augmented intelligence thrives at combining the strengths of both humans and machines
* Generative AI
  + Creates Content (text, images, video, music etc.) from scratch
  + Does not rely on predefined rules; instead uses deep learning techniques
  + Can use LLM (large language models) for processing & generating human like text
* The evolution from traditional AI to generative AI
  + Repository -> Analytics Platform -> Application [Predictive science]
  + Above + Feedback loop (to repository) [AI]
  + Data (not specific or internal to business) -> LLMs (general) -> Prompting & Tuning (specific) / finetuning -> Application layer + feedback loop (to prompting & Tuning layer)
* AGI Artificial General Intelligence
  + Turing test (chatting with something / someone on the other side and not being able to tell if that’s human or AI)
* Chatbots and smart assistants
* GEN AI Solutions
  + Single modality – text
  + Multiple modal solutions
  + OpenAI
    - GPT 3 – text only llm
  + Google
    - PaLM models – text only
    - Gemini models – multi model
  + Amazon
    - Titan model
  + Meta
    - Llama model
  + Anthropic
    - Claude models
  + Microsoft copilot
  + Dall-E , StyleGAN, SuperResolution, adobe Sensei
  + Voice & music generation (Murf, OpenAIs whisper)
  + Jukedeck, amper music, aiva
  + Video generation (google imagen video, openai sora)
  + IBM watsonx
* Use cases
  + Customer service
  + Voice assistance
  + Recommendations
  + Financial transactions
  + Cyber security
  + Transportation
  + Communication
  + Healthcare
  + Marketing & Sales
* Cognitive Computing