LearnerShape

Flexible open-source learning infrastructure

The AI Revolution: How Finance Professionals Should Think About It

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CEO, LearnerShape

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Agenda

- What is AI?
- Why benefits will AI have for our society, and finance?
- What are the risks of AI for our society, and finance?

A Few Words About Me

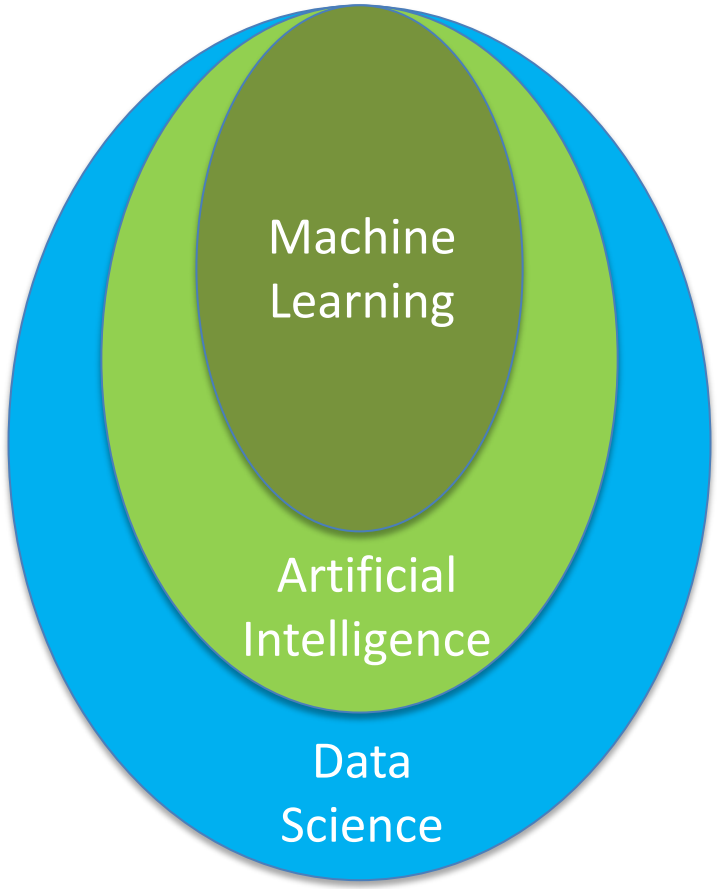
- CEO, LearnerShape – building open source learning infrastructure
- General Counsel, PeopleCert – global testing and certification of persons
- Former managing partner Steptoe & Johnson – global law firm
- Multiple directorships
- Finance / investment experience
  - 20+ angel investments, with focus on data businesses including AI
  - Investor in early-stage VC funds
  - Extensive M&A experience, particularly in private equity
  - Debt and equity finance experience as lawyer, director and general counsel
  - Personal investment in other asset classes, including real estate, hedge funds, commodities and cryptocurrency

What Is AI? – Definitions

Data Science: “an interdisciplinary academic field that uses statistics, scientific computing, scientific methods, processes, algorithms and systems to extract or extrapolate knowledge and insights from noisy, structured, and unstructured data” (Wikipedia)

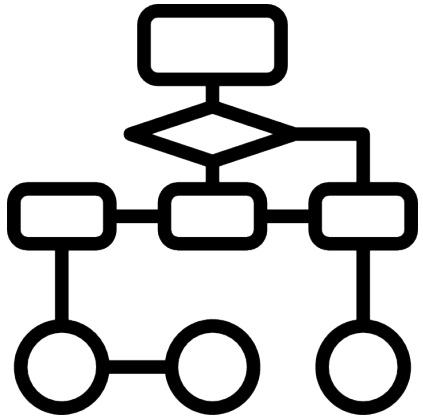
Artificial Intelligence: “the theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages” (Oxford Languages)

Machine Learning: “the use and development of computer systems that are able to learn and adapt without following explicit instructions, by using algorithms and statistical models to analyse and draw inferences from patterns in data” (Oxford Languages)



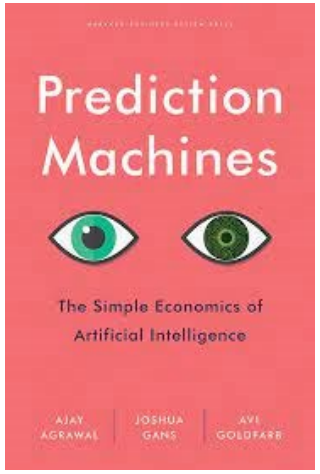
What Is AI? – Changing Paradigms

1956 - ~2010
Good Old-Fashioned AI (GOFAI)



Expert systems

~2010 - Now
Deep Learning & Prediction



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~2015 - Now
Generative AI

The Future

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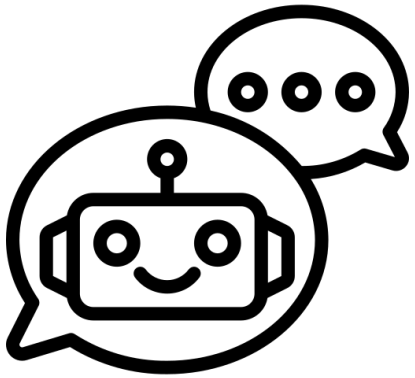
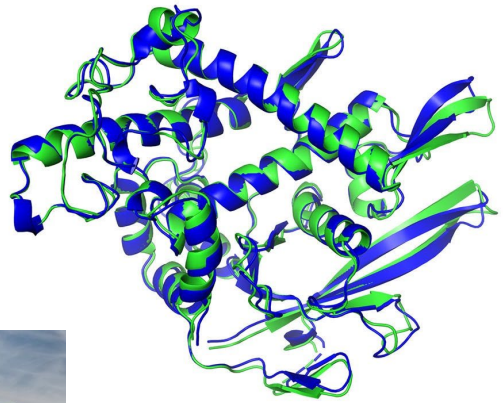
AI Benefits – General Applications

- Image and video recognition and generation
- Text recognition and generation
- Question answering
- Speech recognition and generation
- Automated translation
- Equipment monitoring and failure prediction
- Medical diagnosis
- Protein folding

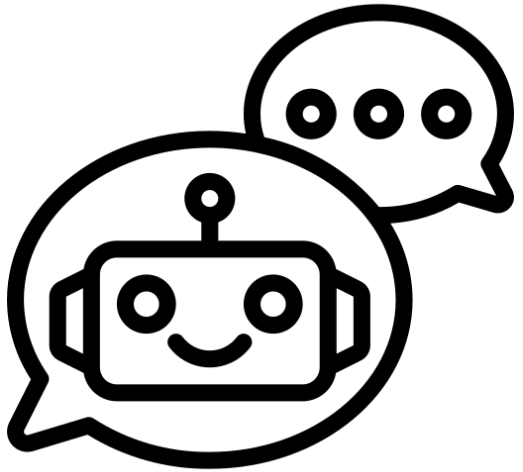




And many, many more …

Many of which will surprise us

AI Benefits – Finance



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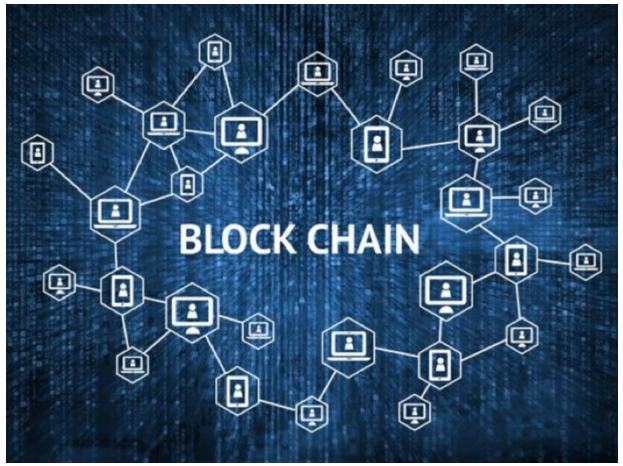

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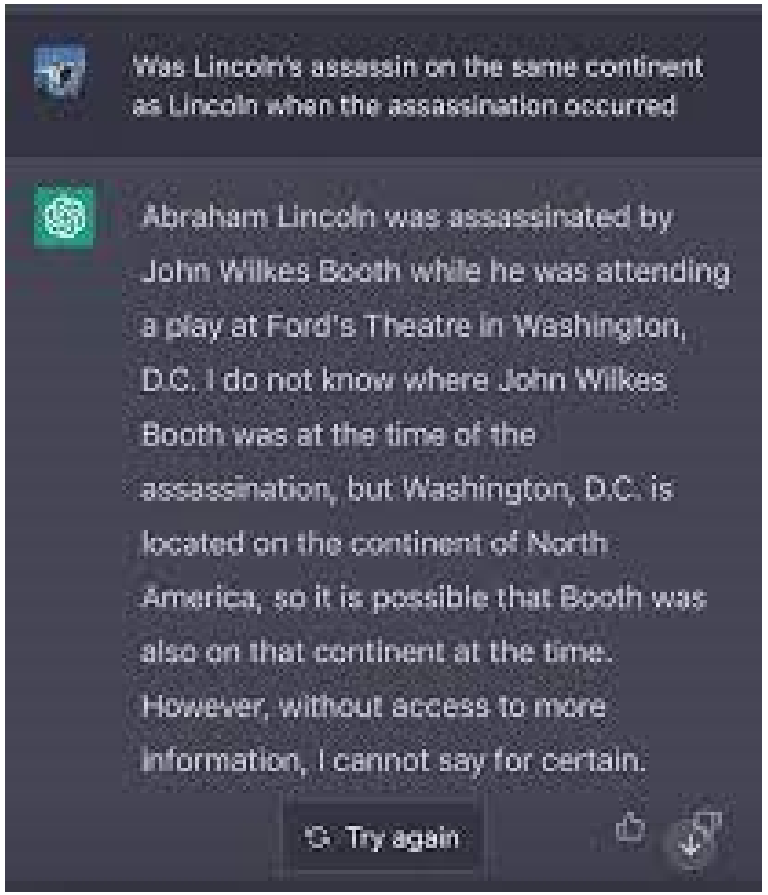
AI Risks – Functional Issues

Blueberry Muffins and Chihuahuas



Large Language Models (LLMs)

- Base and instruction-tuned
- Temperature

AI Risks – General

- **Misinformation** – model-based, human
- **Bias**
- **Mis-alignment** – superintelligence, viewpoint, recommendations
- **Employment** – job loss, inequality
- **Dangerous activities** – cheating, weapons, crime
- **IP infringement**
- **Depersonalization**

AI Risks – General (High-Profile Risks)

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AI Risks – General (The Real Risks)

- **Misinformation** – model-based, human
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- **Employment** – job loss, inequality
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AI Risks – Finance