



Introduction to Artificial Intelligence (AI)

An abstract graphic on the left side of the slide, featuring a dark blue background with a network of glowing blue nodes and connecting lines, resembling a neural network or data flow diagram.

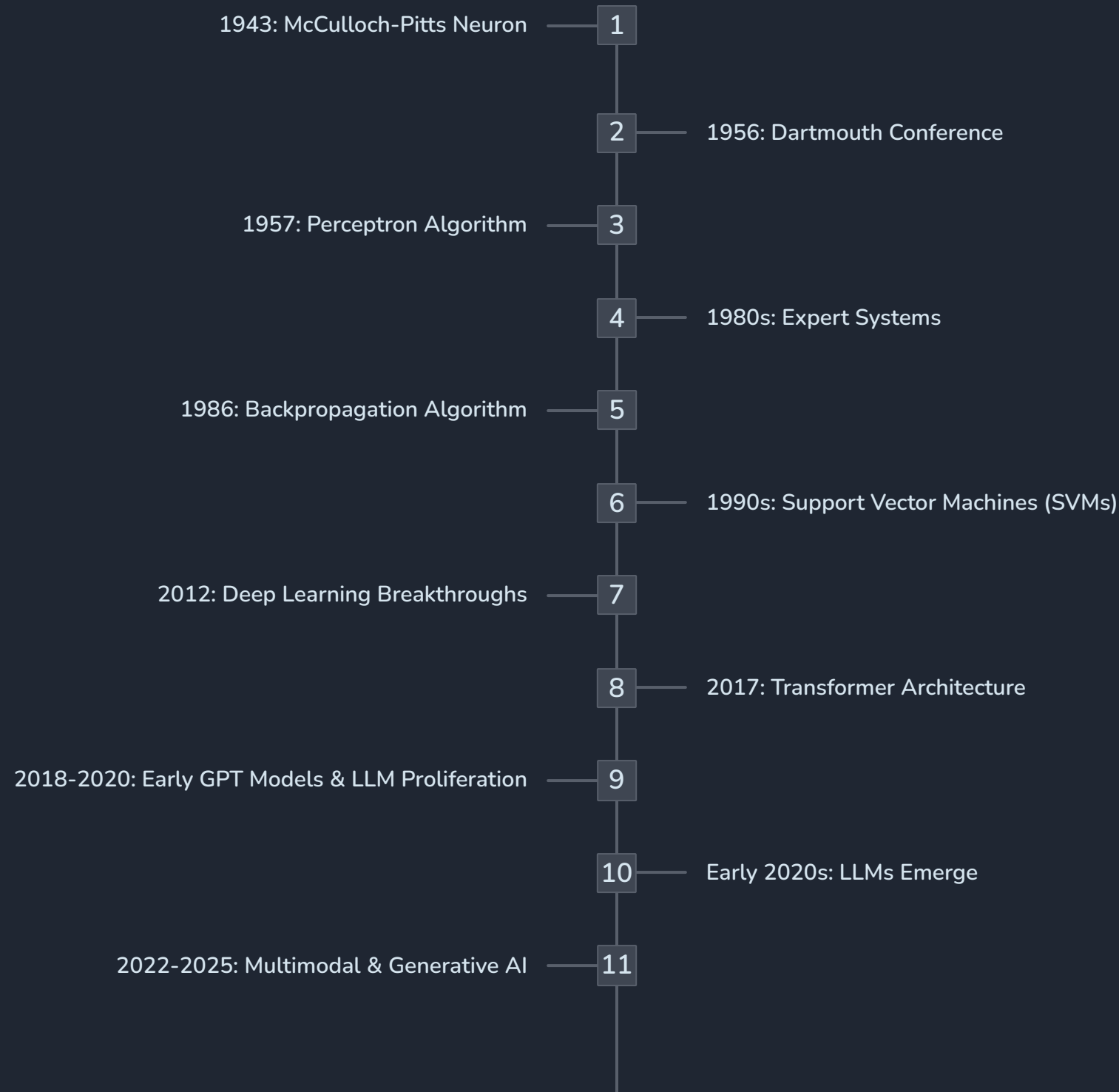
What is AI?

Artificial Intelligence (AI) enables machines to perform tasks typically requiring human intelligence, such as understanding language, recognizing patterns, and making decisions.

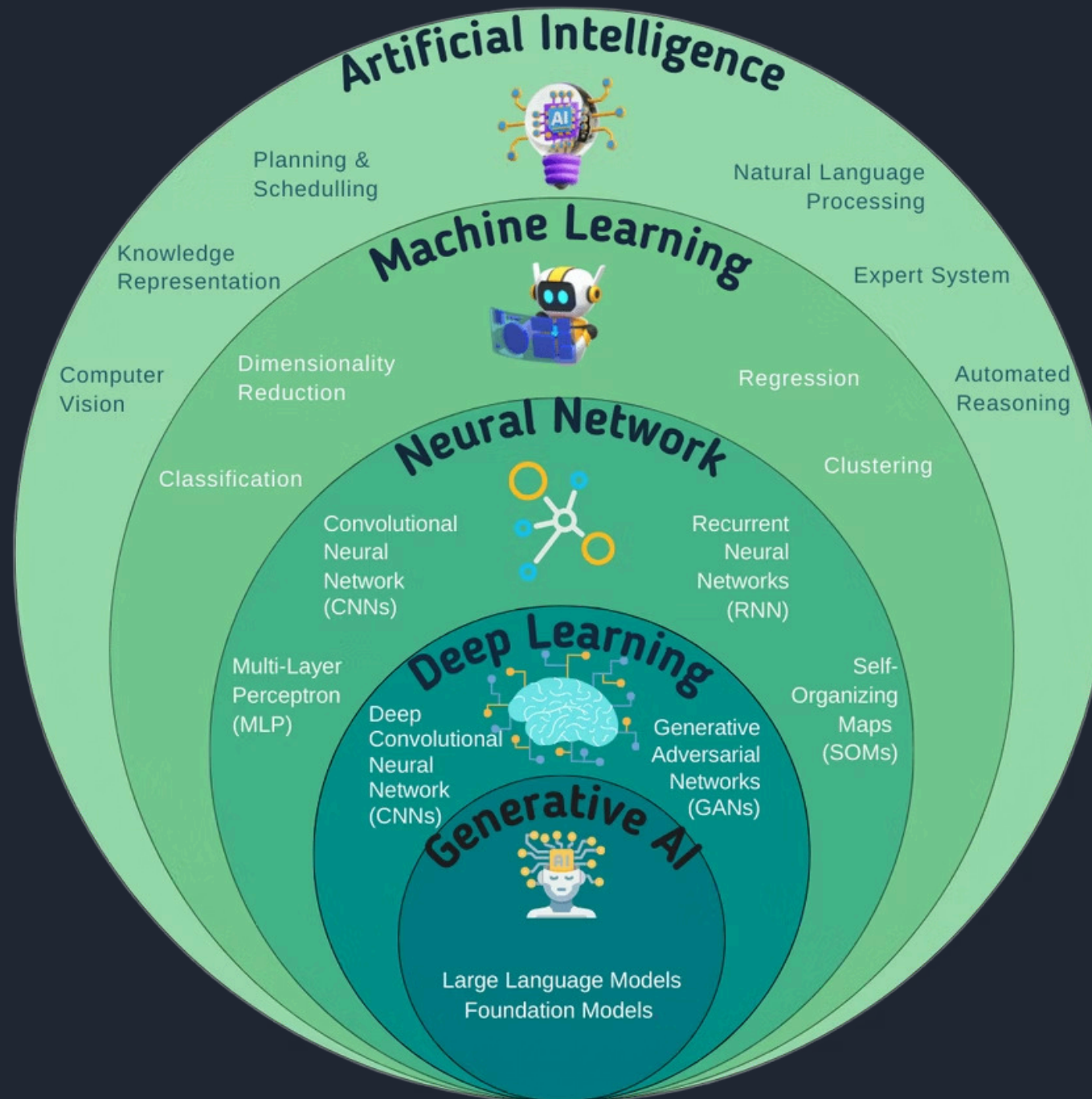
This technology allows computers to learn from experience and adapt to new inputs, essentially mimicking human cognitive functions to enhance our capabilities and automate complex processes.

The Evolution of AI: A Timeline

From foundational algorithms to complex neural networks, Artificial Intelligence has undergone a remarkable transformation focused on model development and refinement.



AI HIERARCHY DIAGRAM



Understanding Large Language Models (LLMs) & Generative AI

Generative AI refers to artificial intelligence models that can create new content, such as text, images, video, audio, and code, by learning patterns from large datasets. Large Language Models (LLMs) are a type of Generative AI specifically designed to understand and generate human-like text based on vast amounts of training data.



Thank you



References

- McCulloch, W. S., & Pitts, W. (1943). A logical calculus of the ideas immanent in nervous activity. *Bulletin of Mathematical Biophysics*, 5(4), 115-133.
- McCarthy, J., Minsky, M. L., Rochester, N., & Shannon, C. E. (1955). A Proposal for the Dartmouth Summer Research Project on Artificial Intelligence.
- Rosenblatt, F. (1958). The Perceptron: A probabilistic model for information storage and organization in the brain. *Psychological Review*, 65(6), 386.
- Buchanan, B. G., & Shortliffe, E. H. (1984). *Rule-Based Expert Systems: The MYCIN Experiments of the Stanford Heuristic Programming Project*. Addison-Wesley.
- Rumelhart, D. E., Hinton, G. E., & Williams, R. J. (1986). Learning representations by back-propagating errors. *Nature*, 323(6088), 533-536.
- Cortes, C., & Vapnik, V. (1995). Support-vector networks. *Machine Learning*, 20(3), 273-297.
- Campbell, M., Hoane Jr, A. J., & Hsu, F. H. (2002). Deep Blue. *Artificial Intelligence*, 134(1-2), 57-83.
- Hinton, G. E., & Salakhutdinov, R. R. (2006). Reducing the dimensionality of data with neural networks. *Science*, 313(5786), 504-507.
- Krizhevsky, A., Sutskever, I., & Hinton, G. E. (2012). Imagenet classification with deep convolutional neural networks. *Advances in neural information processing systems*, 25.
- Vaswani, A., Shazeer, N., Parmar, N., Uszkoreit, J., Jones, L., Gomez, A. N., ... & Polosukhin, I. (2017). Attention Is All You Need. *Advances in Neural Information Processing Systems*, 30.
- Radford, A., Narasimhan, K., Salimans, T., & Sutskever, I. (2018). Improving Language Understanding by Generative Pre-Training.
- Radford, A., Wu, J., Child, R., Luan, D., Amodei, D., & Sutskever, I. (2019). Language Models are Unsupervised Multitask Learners. *OpenAI Blog*, 1(8).