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Machine Learning and AI: Applications, Legal and Ethical Issues and Practical Guidance for Prosecution

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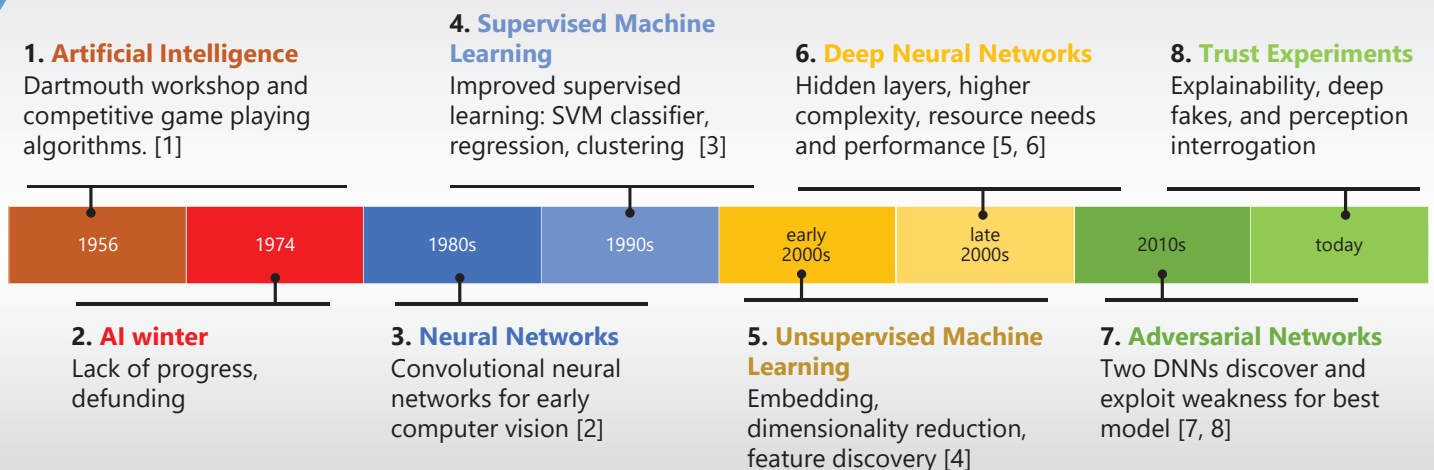
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What is Artificial Intelligence?

A 5min primer.

Progression of AI Architecture

1. Artificial Intelligence
Dartmouth workshop and competitive game playing algorithms. [1]

4. Supervised Machine Learning
Improved supervised learning: SVM classifier, regression, clustering [3]

6. Deep Neural Networks
Hidden layers, higher complexity, resource needs and performance [5, 6]

8. Trust Experiments
Explainability, deep fakes, and perception interrogation

1956	1974	1980s	1990s	early 2000s	late 2000s	2010s	today

2. AI winter
Lack of progress, defunding

3. Neural Networks
Convolutional neural networks for early computer vision [2]

5. Unsupervised Machine Learning
Embedding, dimensionality reduction, feature discovery [4]

7. Adversarial Networks
Two DNNs discover and exploit weakness for best model [7, 8]

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