

The Birth of Machine Learning: A Transformative Force This PDF version includes all text and source links from the infographic. Image URLs are included because external images cannot be embedded without internet access.

1. Frank Rosenblatt's 1957 Perceptron laid the foundation for neural networks. Source: <https://plato.stanford.edu/entries/neural-networks/>
2. The XOR problem (1969) revealed limits in simple networks, motivating multi-layer architectures. Source: <https://ieeexplore.ieee.org/document/4082120>
3. Backpropagation (1986) enabled deep learning. Source: <https://www.nature.com/articles/323533a0>
4. ImageNet (2009) revolutionized dataset-driven ML research. Source: <https://image-net.org/>
5. AlexNet (2012) proved GPU-accelerated deep learning. Source: <https://proceedings.neurips.cc/paper/2012/hash/c399862d3b9d6b76c8436e924a68c45b-Abstract.html>
6. TPUs (2016) reshaped hardware design. Source: <https://arxiv.org/abs/1704.04760>
7. Transformers (2017) introduced attention mechanisms. Source: <https://arxiv.org/abs/1706.03762>
8. ML energy consumption drives green computing research. Source: <https://arxiv.org/abs/1906.02243>
9. ML underpins autonomous vehicles, NLP, fraud detection, and more. Source: <https://www.sciencedirect.com/science/article/pii/S2666827021000155>