

Title: Summary of Machine Learning Research Trends (2021-2024)

Machine learning has seen exponential growth in applications ranging from NLP and computer vision to healthcare and finance.

Key Trends:

1. Transformer architectures have revolutionized both language and vision domains.
2. Transfer learning enables reusing pretrained models across tasks.
3. Few-shot and zero-shot learning reduce the need for labeled data.
4. Robustness, interpretability, and fairness have become top priorities.
5. Open-source datasets and models have accelerated innovation.

Conclusion:

The ML landscape is evolving toward foundation models and adaptive systems, driven by compute power and data availability.