

In this video we took you on a tour of MLE, from the early ideation of AI to the dawn of big data, and on into contemporary history of MLE.

AI: Foundation and subsequent winters

- Initial research:
 - 1950: Computing Machinery and Intelligence, Alan Turing
 - 1958: Frank Rosenblatt develops the first Perceptron at Cornell
- First AI Winter (1973-1981): Dashed Expectations
 - 1973: Lighthill Report
 - 1980: Proliferation of expert systems begins
- Second AI Winter (1987-1997):
 - 1987: Collapse of the expert systems market
 - 1997: IBM's Deep Blue defeats Gary Kasparov

Installation Period: Setting the Stage for MLE

- Dawn of Big Data:
 - 2004: MapReduce: Simplified Data Processing on Large Clusters, Jeffrey Dean and Sanjay Ghemawat
 - 2006: AWS launches its first service to the public: Amazon Simple Storage Service (S3)
- Data-centric approaches to AI:
 - 2006: Fei-Fei Li begins work on ImageNet
 - 2012: AlexNet clears the field in computer vision
- Serverless Movement begin emerging
 - 2014: AWS launches Lambda (and the Serverless Movement)
 - 2016: AWS launches Step Functions
- 2015: Hidden Technical Debt in Machine Learning Systems, Sculley, et al

Modern Machine Learning Engineering

- 2015: Google launches TensorFlow
 - 2016: FAIR launches PyTorch
 - 2017: Tensorflow Extended
- 2018: MLFlow Model Management tool launches
- 2019: Feast Feature Store launches

- 2017: AWS launches SageMaker
- 2019: AWS announces SageMaker Model Monitor
- 2020: AWS announces SageMaker Feature Store, Clarify

Additional Resources

- [Deep Blue - IBM](#)
- [Computing Machinery and Intelligence](#)
- [AI Winters](#)
- [TFX](#)
- [Towards ML Engineering: A Brief History of TensorFlow Extended](#)
- [Dr. Fei-Fei Li speaks about the history of ImageNet](#)
- [MapReduce: Simplified Data Processing on Large Clusters](#)
- [Hidden Technical Debt in Machine Learning Systems](#)
- [AWS History, a visual repository of AWS service announcement dates](#)