



INTRODUCTION

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Inspiration of this course



AI overview



INSPIRATION OF THIS COURSE

2 MAIN TYPES OF THE MARKET



History repeats itself



History doesn't repeat itself

CHALLENGES

Prevent Overfitting

Dynamic behavior

Unseen scenario

FOR MORE EXPLANATION

SOLUTION



Clustering



Dimensionality
reduction



Ensemble
learning



Concept drift



Synthesis data
generating

SOLUTION



Overfit
prevention



Make results
more clear &
get new intuition



Overfit prevention
& Dynamic
behavior



Dynamic
behavior



Unseen
scenario

AI OVERVIEW



AI OVERVIEW



Generative AI



Discriminative AI

GENERATIVE AI

Variational autoencoder (VAE)

Generative adversarial network (GAN)

Autoregressive model

Normalizing flow model

Energy-based model

Diffusion model

DISCRIMINATIVE AI



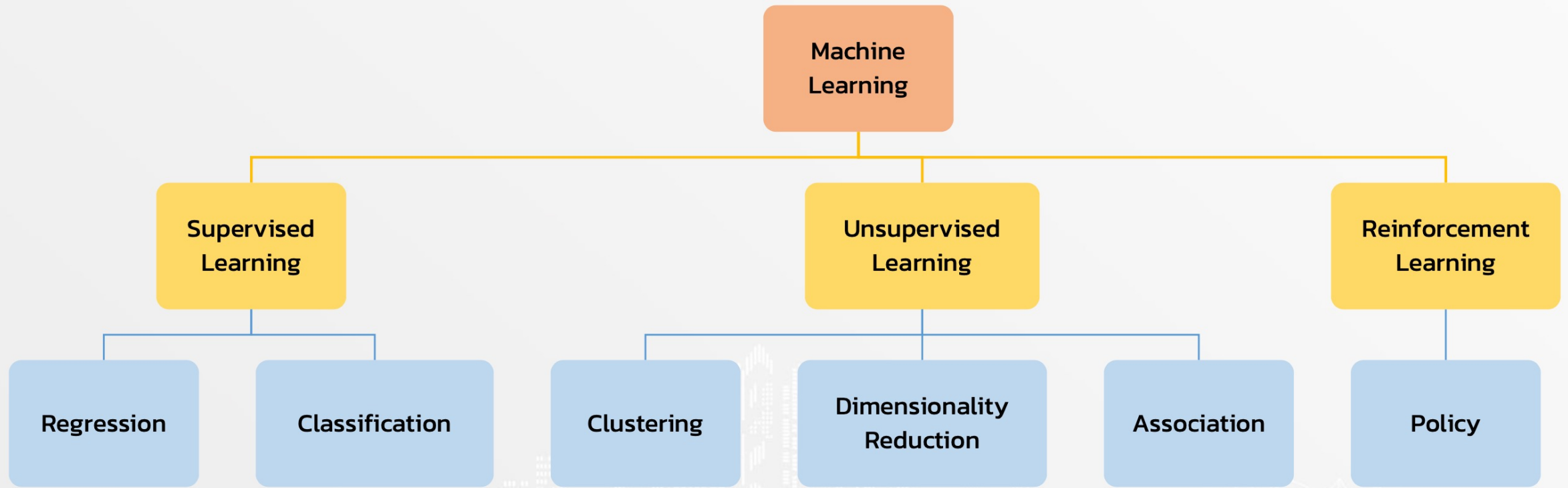
Supervised Learning



Unsupervised Learning

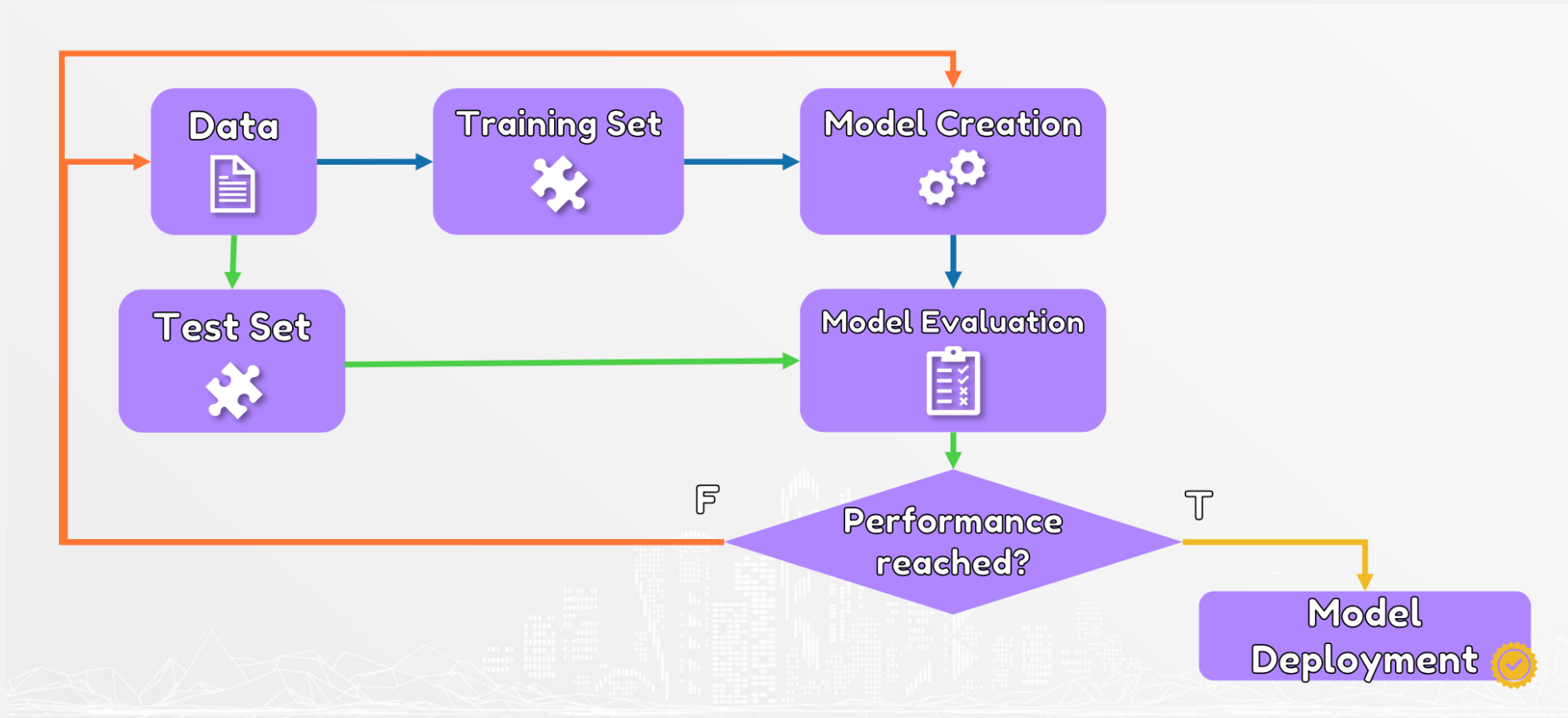


Reinforcement Learning



DISCRIMINATIVE AI

SUPERVISED LEARNING WORKFLOW



REAL FULL WORKFLOW



A top-down view of several wrapped Christmas gifts on a dark wooden surface. The gifts are wrapped in various patterns: red with white hearts, brown with red snowflakes, and brown with red geometric patterns. Some are tied with red ribbons, others with twine or plaid ribbons. In the bottom left, a pair of hands is shown tying a red ribbon bow on a gift wrapped in red and white snowflake paper. The word "THANK YOU" is centered in white serif font.

THANK YOU