AI Graphics

Summary

Machine Learning Fundamentals

Main Topics

- Context

  - Historical Evolution

- Representation Learning

  - Learning Algorithms / Conceptual Scenario / Deep Learning Methods

- Mathematical Framework

  - Neuron / Neural Network / Deep Neural Nets

- Network Architectures

  - MLP / CNN / VAE / GANs / RNN

- Learning

  - Methods / Manifold Learning / Model Parametrization / Combining Networks

3D Deep Learning

Main Topics

- Deep Learning from 3D Data

  - Graphics & Vision Applications / Synergistic Opportunities

- Representation Challenge

  - Representations in CG / Problems in CG

- 3D Deep Learning

  - 3D Geometric Analysis / 3D Synthesis

- A.I. Graphics

  - Research / Challenges / Features / Metrics