

Graph Neural Networks

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Why GNNs?

- Abundance of real-world non-euclidian data
 - social networks
 - citation networks
 - molecules
 - traffic networks
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Background (II)

- Predictions
 - Graph-level
 - Edge-level
 - Node-level
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Background

- Theoretical Foundations
- Graph Convolutional Neural Networks
- Spatial
 - based off a generalization of the convolution operation
- Spectral
 - based off graph signal processing
 - less efficient, though more grounded
- Spatial-Temporal Graph Neural Networks
- Graph Auto-Encoders

Background

Future

Models tested

Architectures

explain why deep GNNs don't scale well

Regularization:

Applications

