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(57) Abstract :
A system and method for deep graph representation learning, comprising a processor configured to execute the computer readable instructions stored in a memory, a user interface to receive an input graph comprising nodes and edges and transforming the input graph into a low-dimensional vector representation using a graph embedding layer and performing a series of graph convolutions on the low-dimensional vector representation using graph convolutional neural network layers to learn high-level features. The graph embedding layer comprises a graph autoencoder or a graph attention network. The graph convolutional neural network layers are trained using backpropagation and stochastic gradient descent.

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