

# Homework 2

[github.com/stefgmz](https://github.com/stefgmz)

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## 1 GCN

### Question 1.1

★ **Solution** ★ Write your answer here.

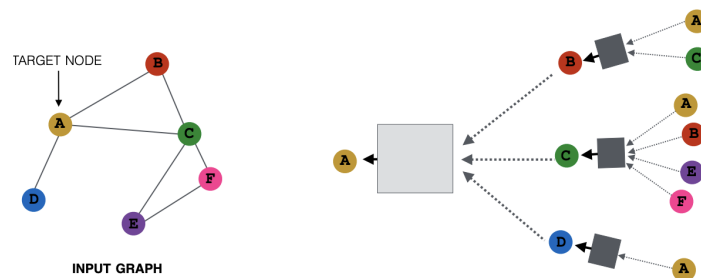
Example for writing a matrix  $M$ :

$$M = \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$$

Example for writing an equation:

$$F = ma \quad (1)$$

Example for inserting a figure:



### Question 1.2

★ **Solution** ★

Question 1.3

★ Solution ★

## 2 Node Embeddings with TransE

Question 2.1

★ Solution ★

Question 2.2

★ Solution ★

Question 2.3

★ Solution ★

Question 2.4

★ Solution ★

## 3 Expressive Power of Knowledge Graph Embeddings

Question 3.1

★ Solution ★

Question 3.2

★ Solution ★

### Question 3.3

★ Solution ★

## 4 Honor Code

(X) I have read and understood Stanford Honor Code before I submitted my work.

\*\* Collaboration: Write down the names & SUNetIDs of students you collaborated with on Homework 2 (None if you didn't).\*\*

\*\*Note: Read our website on our policy about collaboration!\*\*