# Amazon Review Ranking

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## Aim

- Amazon product reviews (textual and stars)
- some reviews have only text
- we want to automatically evaluate the textual reviews by accurate number of stars

## **Dataset**

- training 40 000, testing 8000 reviews
- each review contains at most 100 words
- each word is given unique natural number using standard pre-processing technique (word frequency, similar words have similar numbers)

# **Implementation**

#### 1st try:

- simple recurrent network
- vanishing gradient for fundamental reasons

### 2nd try:

- LSTM
- we are currently debugging it

## **Lessons Learned**

- much deeper understanding of neural networks is needed when implementing them
- without experience, it is hard to predict what has 0 chance to work
- neural networks are hard to debug

Thank you for your attention!