Twitter Thread by Alexey Grigorev



Alexey Grigorev
@Al_Grigor



The toughest data science interview I ever had

I got bombarded for 45 minutes with theoretical questions:

■ Entropy
■ KL divergence, other divergences
■ Kolmogorov complexity
■ Jacobian and Hessian
■ Linear independence
■ Determinant

Continued ■

■ Eigenvalues and Eigenvectors
■ SVD
■ The norm of a vector
■ Independent random variables
■ Expectation and variance
■ Central limit theorem

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■ Gradient descent and SGD
■ Other optimization methods
■ The dimension of gradient and hessian for a neural net with 1k params
■ What is SVM
■ Linear vs non-linear SVM
■ Quadratic optimization

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- What to do when a neural net overfits
- What is autoencoder
- How to train an RNN
- How decision trees work
- Random forest and GBM
- How to use random forest on data with 30k features
- Favorite ML algorithm - tell about it in details

That was tough!