

Overall the solutions were very good

Ziao WANG

Overall very good. Some comments.

Should use log-likelihood instead of likelihood for numerical stability. Did not explain AUC of random and perfect classifiers. Didn't show $KL = \sum(KL \text{ for each word})$, and didn't compute KL analytical calculation.

Yilin YE

Overall very good. Some comments.

Q1 Order of words in a sentence is important. ... Code could be faster by exploiting word dictionary instead of using nested loops. Q2 Use log in intermediate calculations for numerical stability, not at the end. Q3 Did not explain AUC of random / perfect classifiers. Nice plot for the connection between the ROC and the histograms. Q4 The KL does not depend on σ . Must sum over σ to finish the calculation.

Vionnet Simon

Overall good answers. Some comments

Q1 .. Order of words in a sentence is important. Q3.. Explain why AUC of random/perfect classifiers is 0.5, 1? Q4. Derivation not clear in a. Didn't do b,c,d,e.

Vincent Blavy

Excellent answers in most exercises, but why didn't do Q5?

Also missing Q4b

Victor Struillou

Overall very good answers.

In Q4 must sum over σ to finish calculation of KL divergence. Also, should connect slope of log-likelihood with KL divergence.

Touzeau David

Overall excellent. Some comments: In Q4, didn't connect LL decay rate to KL

Tom Colin

Overall excellent. Some comments. Calculation of MI (bonus) is not correct. Q5 there were issues when I tried to run the code.

Thomas Vacus

Overall good answers. But the calculation of the KL is unclear. Also, didn't connect the LL decay rate in Q4 with the KL.

Thibault FREDON

Overall excellent. In Q4, didn't connect LL slope to KL.

Tangchao Liu

Overall good answers. Some comments.

Q1a Order of words in a sentence is important. Q4 should finish calculation of KL by summing over σ . Didn't connect slope of LL to KL. Q5 there were issues with the code, no plots.

Seraille Emeric

Overall excellent. Some comments. Calculation of KL in Q4 unclear. Didn't connect LL slope to KL.

Sébastien LUCAS

Overall excellent. Some comments. Didn't connect LL slope to KL in Q4. Use $\log(Z)$ instead of Z to avoid numerical issues.

Sebastien Kuchly

Overall excellent, all required exercises done correctly. Didn't do all bonus exercises.

Sara Evers

Overall very good. Some comments. In Q4, unclear connection between LL decay slope and the KL.

Rohit Vasav

Overall very good. Solutions to Q4e,d unclear.

Riccardo Paoli

Overall excellent, all required exercises done correctly. Didn't do all bonus exercises.

Reda Nabil

Overall very good . In Q4, didn't connect slopes to KL

Paul BERNARD

Overall very good . In Q4, didn't connect slopes to KL

Naila Betatache

Overall very good. KL calculation missing the $\log(Z)$ terms; didn't connect LL slope to KL.

Maurial Gabriel

Overall excellent. In Q4, didn't connect LL decay slopes to KL

Mathieu Gross

Overall excellent. In Q4, didn't connect LL decay slopes to KL

Louis Chambard

Overall excellent. Issues in the code for Q5 .. Try fixing by computing everything in log-scale for better numerical stability.

Lise Isnel

Overall excellent. In Q4, didn't connect LL decay slopes to KL

Jonas Ruepp

Overall excellent. In Q4, didn't connect LL decay slopes to KL

Jean Sternberg

Overall excellent. Calculation of MI has errors.

Ivan Burenev

Overall excellent. Missing explanation of the pseudocount? Q2c? MI unclear.

Guillaume Bernard

Overall very good. The AUC is too low, compare to solution notebook for possible issues. In Q4, didn't connect the LL slope to KL.

Gaspard Daumas

Overall very good. In Q4, calculation of the KL is unclear. Didn't connect LL slope to KL.

Etienne Parcollet

Overall good answers.

The AUC is too low, classifier code has issues. In Q4, didn't connect to KL.

Etienne Cardi

Overall excellent answers.

Ethan Wanstok

Overall good, but the calculation of the KL in Q4 has errors. Didn't connect LL slope to KL. Errors in the code when running notebook for Q4.

Dupouy Simon

Overall excellent answers.

Dominique Ronco

Overall were good for some of the exercises.

The definition of the ROC is inverted. In Q4, calculation of the KL has errors. Q5 missing?

Diharce Jeremy

Overall good answers.

MI estimate? The KL calculation has some errors, didn't connect LL slope to the KL.

Colombier Juliette

Overall good answers.

MI calculation unclear. In Q4, didn't connect slope to KL, Q4b missing? ... Q5 the plots seem inverted?

Clément Dulin

Didn't explain AUC of perfect/random classifiers; KL calculation incomplete (should also substitute $\log(Z)$); didn't connect slope to KL

Clara Fronda

Overall good answers. Didn't finish calculation of KL for indep model, $\log(Z)$ missing?; Didn't connect slope of LL to KL; In Q5 plots unclear

Benoît Ferté

Overall very good answers.

MI calculation has errors; In Q4, didn't connect slope of LL to KL

Azamat Kaloev

KL calculation incomplete, should substitute Z ; In Q4 didn't connect slope of LL to KL; Q5 is empty

Aysel Shiraliev

Some exercises incomplete. Q1a? 1b? ... Q2 has some errors. In Q4, KL calculation incomplete. Didn't connect KL to slope of LL.

Aychet Sam

Overall good answers.

KL calculation has errors wrong, didn't do all the plots

Apolline DEKENS

Overall very good answers.

Q4b empty, didn't connect slope of LL to KL

Angélique Campaniello

Overall good answers. MI has errors; didn't connect slope of LL to KL; Q5 there are issues with code

Anaclara Alvez

Some exercises incomplete.

Q1a empty; Q4 wrong/empty; Q5 empty

Alexandre Polo

Overall excellent answers.

KL calculation incomplete, $\log(Z)$ must be expanded; everything else very nice

Alexandre Inventar

MI is wrong; didn't connect slope of LL to KL; Q5 missing plots?

Alessio Giorlandino

Overall very good answers. Didn't connect slopes of LL to KL in Q4; Q5 plot unclear.

Albecq Manon

Inverted ROC. In Q4, KL has errors; newspaper classification unclear; didn't connect slope of LL to KL.

Adrien Lopez

Excellent answers. Very clear and concise.

Adrien Kahn

Very good answers. In Q2 likelihood histograms unclear.

Adrien Fauste-Gay

Overall good answers.

KL calculation incomplete, missing $\log(Z)$, some plots missing in Q4, no plots in Q5.