

carl: a likelihood-free inference toolbox

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Summary

Carl is a likelihood-free inference toolbox for Python. Its goal is to provide tools to support inference in the likelihood-free setup, including density ratio estimation algorithms, parameterized supervised learning and calibration procedures.

Methodological details regarding likelihood-free inference with calibrated classifiers can be found in the companion paper (Cranmer, Pavez, and Louppe 2015).

Future development aims at providing further density ratio estimation algorithms, along with alternative algorithms for the likelihood-free setup, such as ABC.

References

Cranmer, Kyle, Juan Pavez, and Gilles Louppe. 2015. “Approximating Likelihood Ratios with Calibrated Discriminative Classifiers.”