

More on multi-task learning-different input space

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1:59 PM

Todo after MLCB submission

Many literatures use K to denote number of tasks

Completely different task space (image, text) vs variable length task space (missing data, sparse)

Introduction focused on MTMO while Problem formulation has more visualization

Optimization method (EM or gradient based)

Bayesian Optimization

[Generalization Errors and Learning Curves for Regression with Multi-task Gaussian Processes \(neurips.cc\)](#)

We provide some insights into how task correlations in multi-task Gaussian process (GP) regression affect the generalization error and the learning curve

[2105.07889v2 \(arxiv.org\)](#)

Simultaneous Meta-Learning with Diverse Task Spaces(very different task space)

[\[Bug?\] Much larger variance with MultiTask kernel compared to Independent Model List · Issue #1834 · cornellius-gp/gpytorch · GitHub](#)

[Linking Heterogeneous Input Spaces with Pivots for Multi-Task Learning \(siam.org\)](#) (very different task space)

<https://mlg.eng.cam.ac.uk/pub/pdf/ZhaGhaYan08.pdf>

Flexible Latent Variable Models for Multi-Task Learning

<https://stackoverflow.com/questions/57216216/keras-multitask-learning-with-two-different-input-sample-size>

<https://arxiv.org/abs/1807.02442>

Multi-Task Learning with Incomplete Data for Healthcare

[Large scale multi-output multi-class classification using Gaussian processes \(springer.com\)](#)