

Recent Research on Support Vector Machines

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Abstract

In this lecture we are going to discuss recent developments for an important class of algorithms in data sciences, the Support Vector Machines.

Some results have been published in the papers below:

1. “Ramp-loss nonparallel support vector regression: Robust, sparse and scalable approximation” (Tang, Long, Tian, Yingjie, Yang, Chunyan, Panos M.Pardalos), Knowledge-Based Systems, Vol 147, 1 May 2018, pp 55-67
2. “A novel perspective on multiclass classification: Regular simplex support vector machine” (Tang Long, Tian Yingjie, Panos M. Pardalos) Information Sciences, Vol. 480, pp 324-338 (April 2019)
3. “Structural improved regular simplex support vector machine for multiclass classification” (Long Tang, Yingjie Tian, Wenjun Li, Panos M Pardalos), Applied Soft Computing, Volume 91, 106235 (June 2020)
<https://www.sciencedirect.com/science/article/abs/pii/S1568494620301757>
4. “A Survey of Support Vector Machines with Uncertainties” (Ximing Wang, Panos M. Pardalos) Annals of Data Science, (2014) 1 (3-4), pp. 293-309