Identifiant de la contribution : **238**　　　　　　　　　　　　　　Type : **non spécifié**

”FLEET#6 - Investigating the usage of Proxy-A-Distance as a measure of dataset shift detection and quantification in an automotive booming noise classification setting”

mardi 11 juillet 2023 12:20 (20)

"Machine learning methods, which can be effective tools for NVH end-of-line testing applications, are typically data-demanding. Techniques like transfer learning and data augmentation have been proposed to overcome this need. For effective transfer learning, it is imperative to compare the source and target datasets and assess the disparity between the two.

In this paper, we study the applicability of Proxy-A-distance for dataset shift detection and quantification. We use the case-study of booming noise detection in automotive end-of-line quality testing with simulated class distribution and mixture component shifts for this investigation. The Proxy-A-distance method works with the help of a domain classifier and emerges as a straightforward and reliable procedure for shift detection. Furthermore, its gradual monotonic rise with increasing dataset divergence makes it suitable for shift quantification. However, it is important to note that there seems to be a low correlation between Proxy-A-distance and transferability, which warrants further exploration."

Presenter(s) :　KUNTE DEEPTI

Classification par session :　Survishno 2 / Fleet Monitoring