

Comparative Study Between KNN & SVM

Binitta Sunny¹, Leema George²

Student, Computer Science, Santhigiri College of Computer Sciences, Thodupuzha, India¹

Assistant professor, Computer Science, Santhigiri college of computer sciences, Thodupuzha, India²

Abstract: Two popular machine learning methods are Support Vector Machines (SVM) and k-Nearest Neighbour (KNN). KNN Algorithms simply store datasets throughout the training phase, and when new data is received, it is classified into a category that is quite similar to the new data. SVM is a supervised machine technique that may be used for both classification and regression. Though we also state regression problems, categorization is the best fit. The SVM algorithm's goal is to find a hyperplane in an N-dimensional space that distinguishes between data points. Used for categorising images, The KNN and SVM each have strengths and disadvantages. When classifying an image, the SVM creates a hyperplane, dividing the input space into classes and classifying the image based on that hyperplane.

Keywords: K-Nearest Neighbour, Support Vector Machine, Remote Sensing, Small Unmanned Aircraft System, etc.

REFERENCES

- [1] Calkins, A.T. 2017. Unmanned aircraft systems (UAS) and photogram metrics as a tool for archaeological investigation in 19th Century historic archaeology. Thesis. Reno, NV: University of Nevada. 122 p
- [2] Eidenshink, J.C.; Schwind, B.; Brewer, K.; Zhu, Z.-L.; Quayle, B.; Howard, S.M. 2007. A project for monitoring trends in burn severity. Fire Ecology.
- [3] Aplet, G.H.; Wilmer, B. 2010. Potential for restoring fire-adapted ecosystems: Exploring opportunities to expand the use of wildfire as a natural change agent. Fire Management Today. 70(1):
- [4] Zhou, G.; Li, C.; Cheng, P. 2005. Unmanned aerial vehicle (UAV) real-time video registration for forest fire monitoring. Geosci. Remote Sens. Symp. 2005 IGARSS05 Proc. 2005 IEEE Int., vol. 3, 2005

BIOGRAPHY



Binitta Sunny is studying Master of Computer Applications in Santhigiri College of Computer Sciences, Vazhithala, Idukki, Kerala. She has completed her Bachelor of Computer Applications from Mahatma Gandhi University, Kerala. She has published a paper in IJSR.



Leema George received the M. Tech degree. She is currently working as an assistant professor in Santhigiri College of Computer Sciences, Vazhithala.