## Support Vector Machine Based Retinal Therapeutic for Glaucoma Using Machine Learning Algorithm

Authors: P. S. Jagadeesh Kumar, Mingmin Pan, Yang Yung, Tracy Lin Huan

**Abstract**: Glaucoma is a group of visual maladies represented by the scheduled optic nerve neuropathy; means to the increasing dwindling in vision ground, resulting in loss of sight. In this paper, a novel support vector machine based retinal therapeutic for glaucoma using machine learning algorithm is conservative. The algorithm has fitting pragmatism; subsequently sustained on correlation clustering mode, it visualizes perfect computations in the multi-dimensional space. Support vector clustering turns out to be comparable to the scale-space advance that investigates the cluster organization by means of a kernel density estimation of the likelihood distribution, where cluster midpoints are idiosyncratic by the neighborhood maxima of the concreteness. The predicted planning has 91% attainment rate on data set deterrent on a consolidation of 500 realistic images of resolute and glaucoma retina; therefore, the computational benefit of depending on the cluster overlapping system pedestal on machine learning algorithm has complete performance in glaucoma therapeutic.

**Keywords:** machine learning algorithm, correlation clustering mode, cluster overlapping system, glaucoma, kernel density estimation, retinal therapeutic

Conference Title: ICGVFL 2018: International Conference on Glaucoma: Visual Field Loss

**Conference Location :** Prague, Czechia **Conference Dates :** March 22-23, 2018