FINAL PROJECT - RELATED LITERATURE

SUBMITTED BY- NAKSHATRA AGARWAL

PROJECT- CELL TRACKING CHALLENGE

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Two cascaded convolutional neural networks are used by them. The first network is used to detect cell instances. The second one is used to predict segmented cells and borders by using the first network output as prior information. They divided each feature into different classes: cell, border and background. Silver truth annotations are used for the classes. To obtain final segmentation, they used the watershed method, the input of the watershed is the cell and the border labels and cell as a marker.

MY APPROACH-

Segmenting and tracking moving cells in time-lapse video sequences is a challenging task, required for many applications in both scientific and industrial settings. So, for comparison with the existing result, a support vector machine [1][2] is used to implement the cell tracking and implementation in this project. HeLa cells on flat glass datasets are analyzed in this project, a total sample size of training and challenge data is 83 images each. After implementing the SVM on the training and challenge dataset, the accuracy of 98% and 97% are obtained [3].

References-

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3. Steil, J., Hagestedt, I., Huang, M. X., & Bulling, A. (2019, June). Privacy-aware eye tracking using differential privacy. In Proceedings of the 11th ACM Symposium on Eye Tracking Research & Applications (pp. 1-9).