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Intelligent Surveillance System for Crime Prevention Using Deep Learning

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Abstract: This project aims to develop a Criminal Face and Violence Detection System for Public Safety that utilizes computer vision and machine learning techniques to detect and recognize criminal faces and violence in real-time or from uploaded videos. The successful implementation of this system can significantly reduce the time and resources required for manual surveillance and improve the effectiveness of public safety measures.

Keywords: Violence Detection, Face Recognition, Computer Vision, Deep Learning, Smart Surveillance System.

REFERENCES

- [1] Dorogyy, Y., Kolisnichenko, V. and Levchenko, K., 2018, September. Violent crime detection system. In 2018 IEEE 13th international scientific and technical conference on computer sciences and information technologies (CSIT) (Vol. 1, pp. 352-355). IEEE.
- [2] MobileNetV2: Inverted Residuals and Linear Bottlenecks, Sandler M, Howard A, Zhu M, Zhmoginov A, Chen LC. arXiv preprint. arXiv:1801.04381, 2018.
- [3] Rajapakshe, C., Balasooriya, S., Dayarathna, H., Ranaweera, N., Walgampaya, N. and Pemadasa, N., 2019, December. Using cnns rnns and machine learning algorithms for real-time crime prediction. In 2019 International Conference on Advancements in Computing (ICAC) (pp. 310-316). IEEE.
- [4] Samundeswari, S., Harini, M., Dharshini, T. and Srinithi, S., 2022, November. Real-time Crime Detection Using Customized CNN. In 2022 1st International Conference on Computational Science and Technology (ICCST) (pp. 416-419). IEEE.
- [5] Apoorva, P., Impana, H.C., Siri, S.L., Varshitha, M.R. and Ramesh, B., 2019, March. Automated criminal identification by face recognition using open computer vision classifiers. In 2019 3rd International Conference on Computing Methodologies and Communication (ICCMC) (pp. 775-778). IEEE.
- [6] M. Soliman, M. Kamal, M. Nashed, Y. Mostafa, B. Chawky, D. Khattab, "Violence Recognition from Videos using Deep Learning Techniques", Proc .9th International Conference on Intelligent Computing and Information Systems (ICICIS'19), Cairo, pp. 79-84, 2019.

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[7] Hamann, K. and Smith, R., 2019. Facial recognition technology. Criminal Justice, 34(1), pp.9-13.

