MLSA MIET

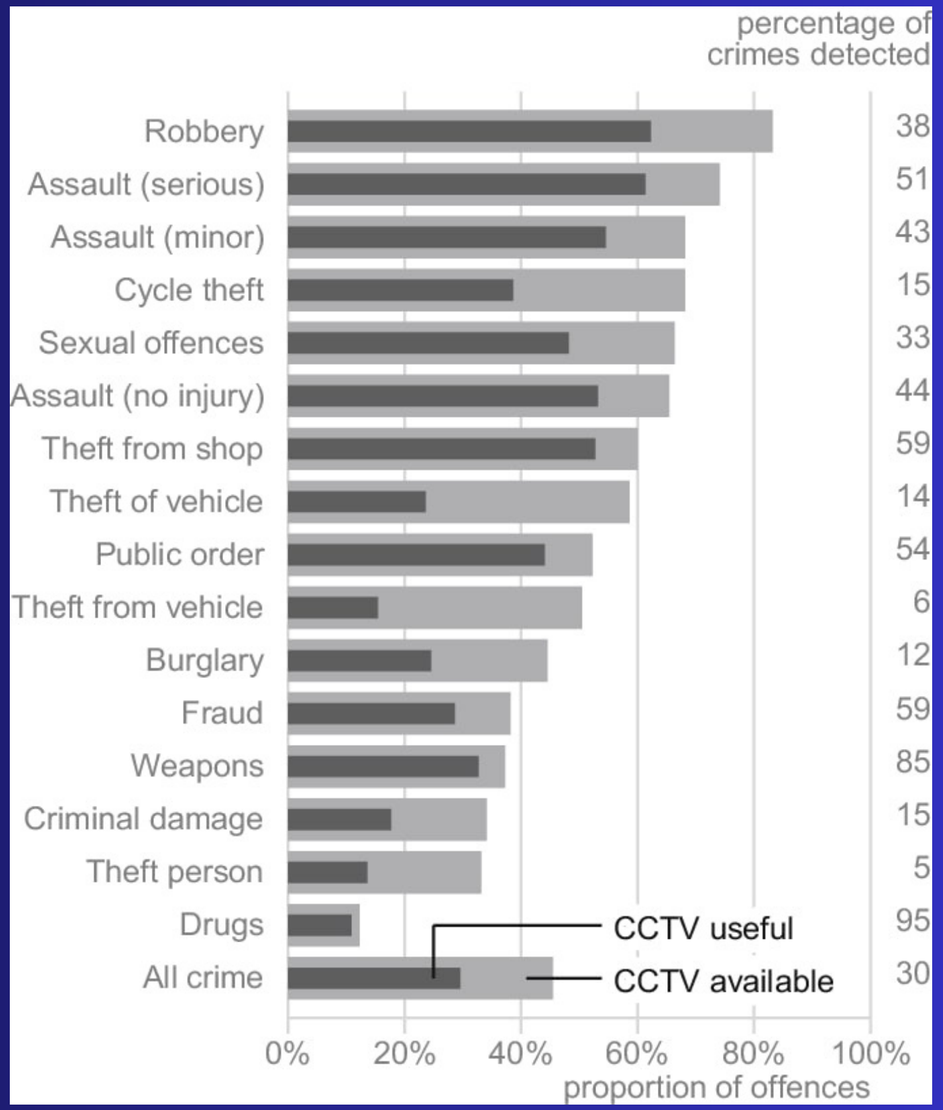
DEV GATHERING HACKATHON

EagleEye Surveilance

Team NonVoilence

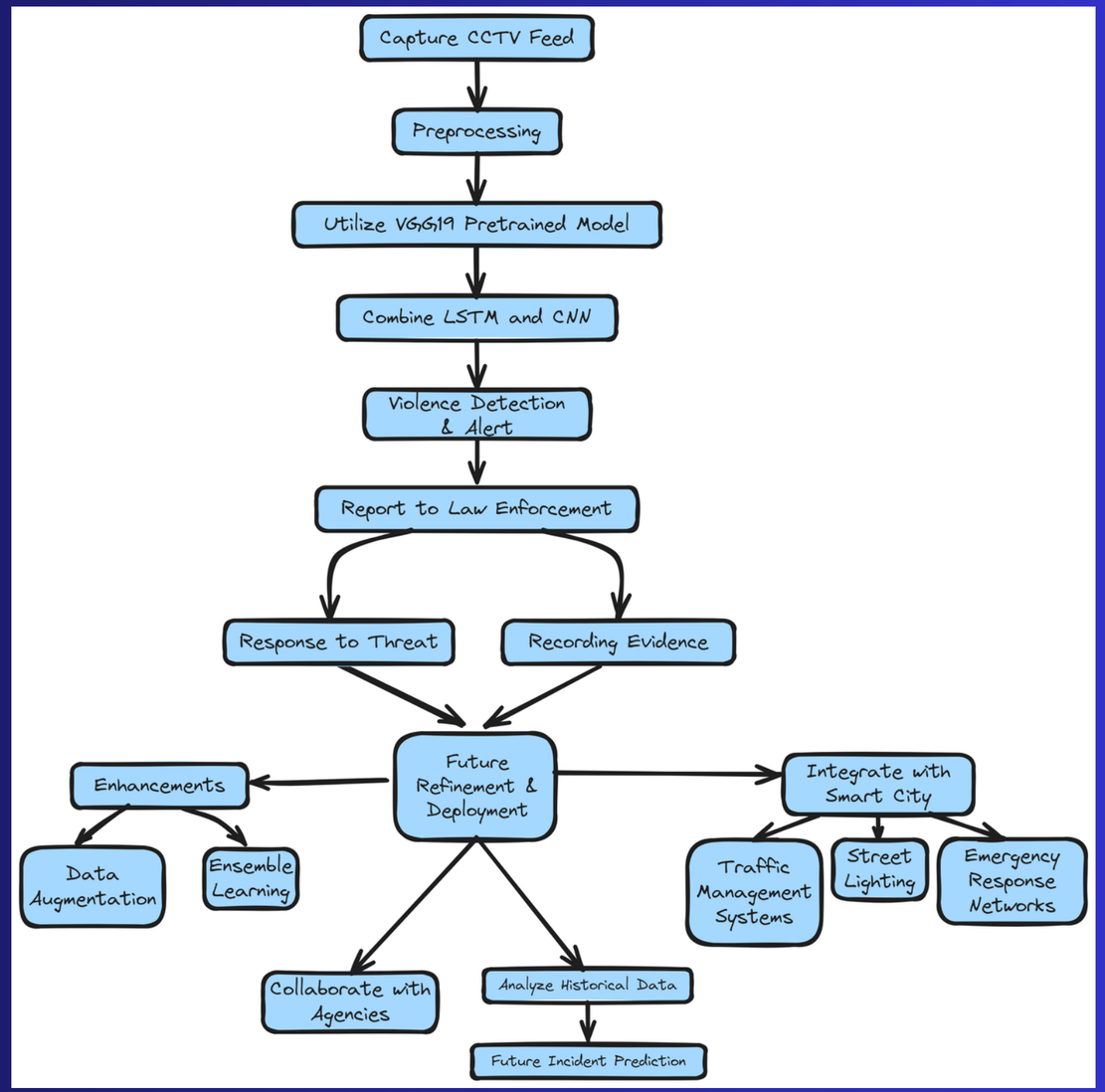
Problem Statement

- Manual monitoring of CCTV footage for violence is labor-intensive and prone to errors and lacks behind from instant-alert aspects.
- Human operators struggle to keep pace with the vast amount of video data generated.
- This results in delayed response times for the needy, with many crimes going unreported or unnoticed until it's too late.



Solution

- Utilize deep learning model combining LSTM and CNN in PyTorch with VGG19 pretrained model for violence detection in CCTV videos.
- This provides instant detection and responses to threats like public violence, firearms, road accidents, accidental fires and other such public hazards.
- Such a model would revolutionize public safety by providing instant detection of threats and automatic crime reporting.



Future Goals

- **Collaborations:** Opportunities for collaboration with law enforcement agencies, security firms, and researchers to further refine and deploy the model.
- **Enhancements:** Explore techniques for improving model accuracy and robustness, such as data augmentation and ensemble learning.
- **Integration with Smart City Infrastructure:** Integrating model with other components of a smart city infrastructure, such as traffic management systems, street lighting, and emergency response networks, can create responsive urban environment.
- **Predictive Analytics:** By analyzing historical data and patterns of criminal activity, the ML model can be trained to predict future incidents.

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