

Forecasting Heroin Overdose Occurrences from Crime Incidents

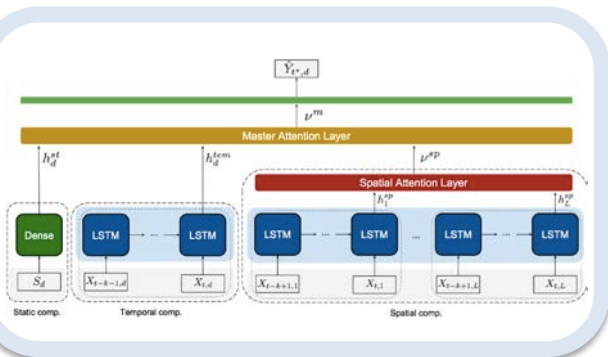
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📈 Opioid overdose has increased at an alarming rate

- To enhance the overdose surveillance
- To identify the areas in need of prevention effort
- We explore the forecasting capability of heroin overdose occurrences using real-time crime data.

Identification of significant static and dynamic features

Model spatiotemporal patterns of crime incidents to forecast future heroin overdose occurrences



Discovering the predictive hotspot neighborhoods

No_Unique_Incidents	0.384
No_Incidents_UCR_Groups	0.279
Part_2_Minor	0.561
Theft	0.484
Burglary/Breaking Entering	0.450
Robbery	0.144
Aggravated Assaults	0.080
Rape	0.085
Unauthorized Use	0.099