

8. Frequent subgraph mining (FSM) could be used to meaningfully study the dataset of the locations of individual humans, dogs, horses, mosquitoes, and birds that contracted the West Nile virus over a period of time by determining the probabilities/rates of each different individual contracting West Nile virus. Since scientists have studied DNA and know which individual (directly) transmitted the virus to which other individual. The vertices of the graph would consist of the different types of individuals and the edges would connect which individual (directly) transmitted the virus to which other individual. A FSM analysis could address, "Which individuals out of humans, dogs, horses, mosquitoes, and birds infected the most other individuals," or "Which individuals are infecting other individuals and which individuals are not infecting other individuals at all?" Trends may be established showing perhaps that bird are infecting humans at a higher rate than thought by coming in contact with their feces.