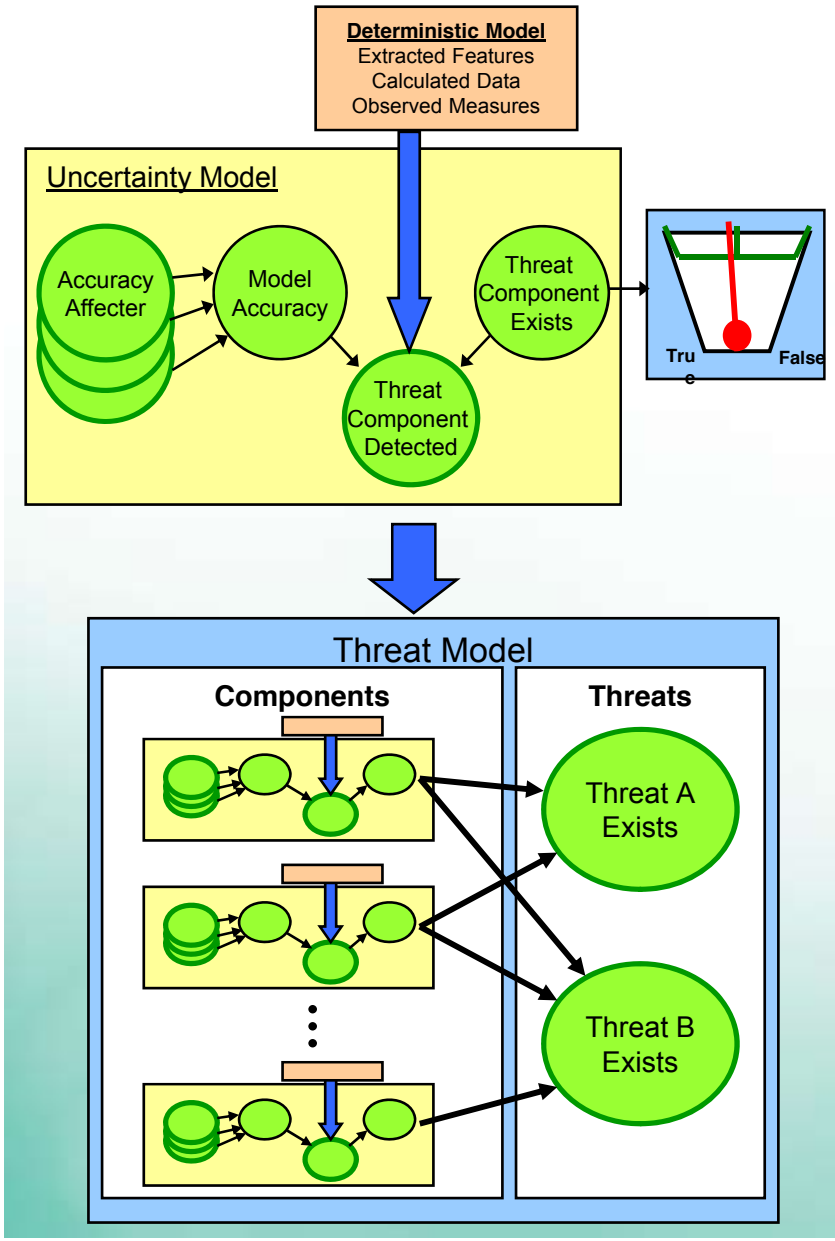
Intelligent Information Fusion For Threat Assessment



Problem Statement:

- **Assessing the likelihood of a situational threat is challenging due to the complexity of merging data from disparate sources and different formats. In addition, those factors in the situational context that affect the accuracy of observed measurements must be considered.**

Technical Approach:

- **We are currently researching novel approaches to fusing different types of information (images, raw text, and historical data) in order to accurately assess the probability of a situational threat. The threat models under development dissect a given threat into a set of threat components. Each component takes as input an acquired deterministic measurement or analysis result. The results are combined with an uncertainty model that leverages intelligent algorithms to significantly reduce the occurrence of false positives or false negatives. The presence of the various threat components are then combined to determine the likelihood if a given threat exists.**

Benefit:

- **Using Intelligent Information Fusion yields a more accurate situational threat assessment. By accounting for the factors that affect the accuracy of detected threat components, we can reliably bound the certainty that a real threat exists.**

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