7TH ANNUAL DISRUPTIVE TECHNOLOGIES CONFERENCE

Fusion and Inference from Multiple and Massive Disparate Data Sets: Anomaly Detection in Time Series of Attributed Graphs

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NATIONAL SECURITY SCIENCE AND ENGINEERING FELLOW PANEL:
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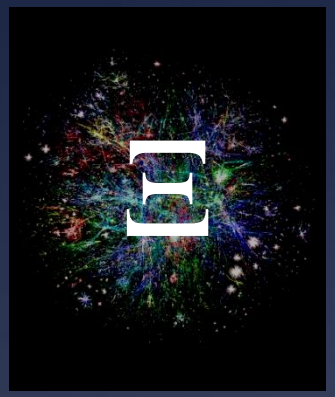
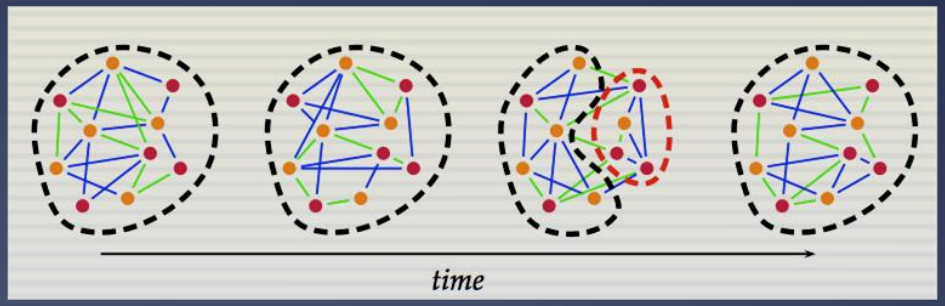
Fusion and Inference from Multiple and Massive Disparate Data Sources

f:  $\longrightarrow$ $M = \{(V_i, x_i, t_i)\}$

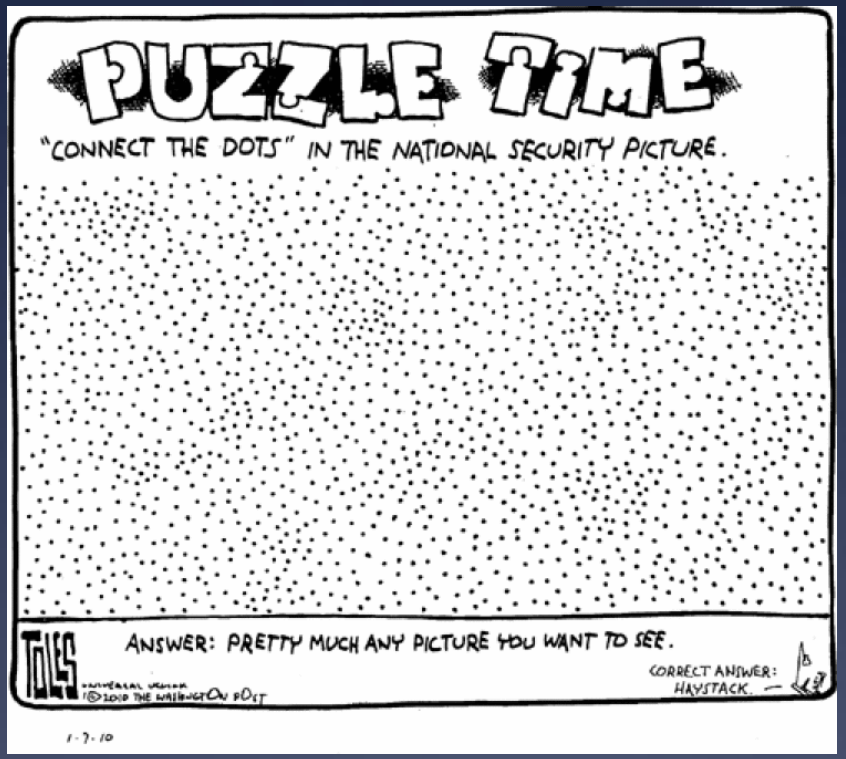
g: M $\longrightarrow$ 

f extracts "events" (V_i, x_i, t_i) -- who does what when

g produces time series of attributed graphs $\{G_t(M)\}$

Anomaly Detection in Time Series of Attributed Graphs

Connecting the Dots



Statistical Inference, Model Selection, and the Bias-Variance tradeoff

Leopold Kronecker to Hermann von Helmholtz:

"The wealth of your practical experience
with sane and interesting problems
will give to mathematics
a new direction and a new impetus."

Leopold Kronecker

Hermann von Helmholtz