



Predictive Analytics Challenges

(Prediction/Forecasting)

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$$(p-eA)2/2m$$

010011000010 01000111000110
001011110101000011110101010
1101000010 101111000001001

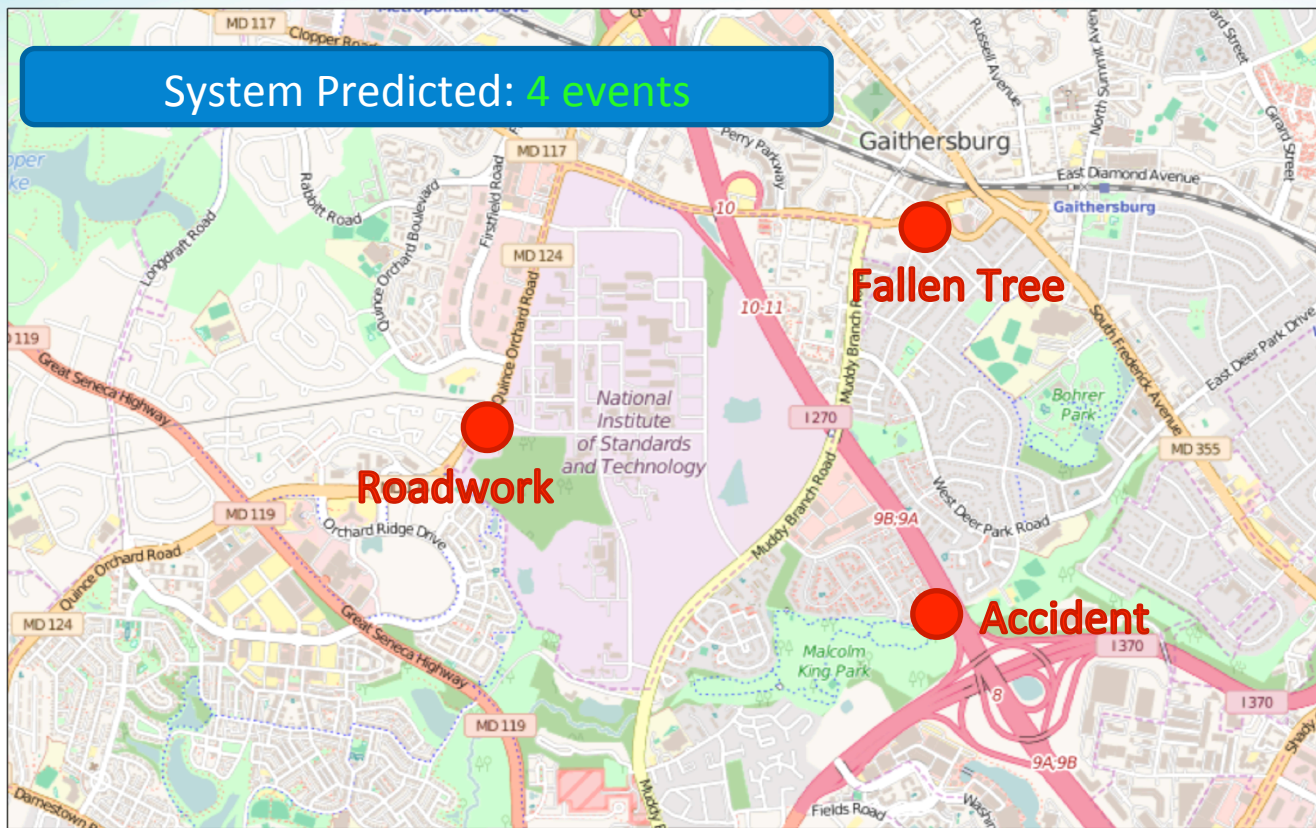
$$E = -\partial A / \partial t$$

Defining Prediction

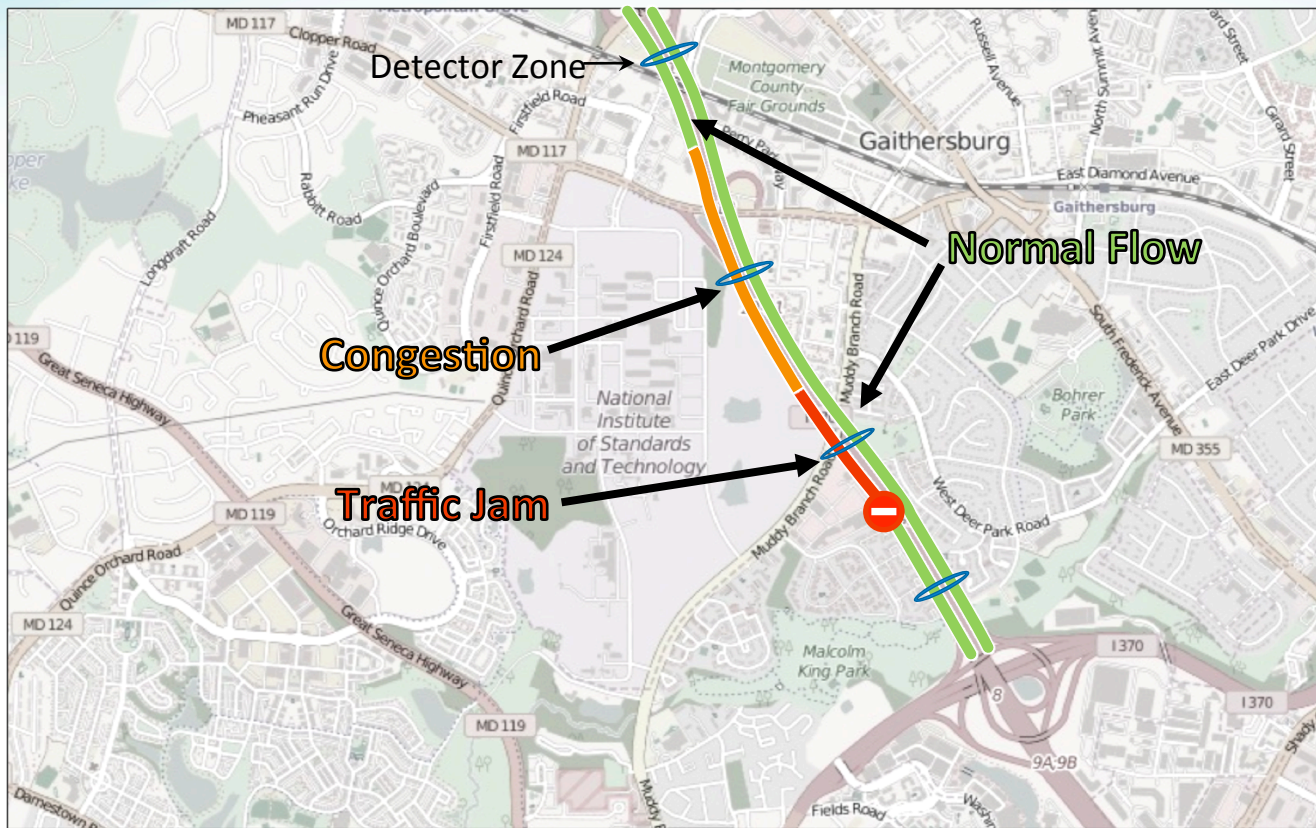
“Prediction refers to the estimation of a variable or multiple variables of interest at future times. In our pilot traffic flow prediction challenge, we wish to predict traffic speed using covariates including flow volume, percentage occupancy, and training sets of past multivariate time series.”

Dorr, Bonnie J., et al. "The NIST IAD Data Science Program." Data Science and Advanced Analytics (DSAA), 2015. 36678 2015. IEEE International Conference on. IEEE, 2015.

Prediction in the Traffic Domain



Forecasting in the Traffic Domain



Other Examples of Prediction/ Forecasting

- Flood prediction
- Tax fraud prediction
- Product forecasting
- Economic forecasting
- Weather forecasting
- Political forecasting
- Flood forecasting

What Prediction/Forecasting
challenges arise in your domain
of expertise?

