



## **DASHlink: A Collaborative Platform for Disseminating Data Mining and Predictive Methods for Aircraft Health Management**

Speaker: Ashok N. Srivastava, Ph.D.

NASA developed the DASHlink platform ([dashlink.arc.nasa.gov](http://dashlink.arc.nasa.gov)) to disseminate advanced data mining, machine learning, and other algorithms and data sets to the public. In the area of aviation safety, NASA is developing machine learning and text mining techniques to rapidly analyze complex data sets containing both numeric and text data to detect precursors to aviation safety incidents. This talk will describe recent innovations at NASA that are relevant for the business jet community, and will describe how operators can work with some of our advanced algorithms available on DASHlink on their own datasets. The speaker is the founder of DASHlink and will discuss several case studies from the aviation domain along with a demonstration of the DASHlink system.



Articles:

### **Technical Papers**

A few technical references on the topics of the talk:

- Multiple Kernel Anomaly Detection:  
<https://c3.ndc.nasa.gov/dashlink/projects/34/>
- Block-GP: Block-GP: Scalable Gaussian Process Regression for Multimodal Data:  
<https://c3.ndc.nasa.gov/dashlink/resources/284/>
- Stable and Efficient Gaussian Process Calculations:  
<http://jmlr.csail.mit.edu/papers/volume10/foster09a/foster09a.pdf>
- Text Mining: Classification, Clustering, and Applications:  
<http://www.amazon.com/Text-Mining-Classification-Clustering-Applications/dp/1420059408>
- Leading Edge TV Show:  
[http://www.youtube.com/NASATelevision#p/a/u/0/Xi3rc9n\\_-kY](http://www.youtube.com/NASATelevision#p/a/u/0/Xi3rc9n_-kY)

Other papers by the speaker can be found at:

<https://c3.ndc.nasa.gov/dashlink/members/5/resources/?type=pub>