

# **Large-scale automated forecasting for network safety and security monitoring**

R. Naveiro Flores; S. Rodríguez Santana; D. Ríos Insua

## **Abstract-**

**Large-scale real-time streaming data pose major challenges to forecasting, in particular, defying the presence of human experts to perform the required analysis. We present here a class of models and methods used to develop an automated, scalable, and versatile system for large-scale forecasting oriented toward network safety and security monitoring. Our system provides short- and long-term forecasts and uses them to detect issues, well in advance, that might take place in relation with multiple Internet-connected devices.**

**Index Terms-** Bayesian methods, dynamic models, forecasting, network monitoring, real-time predictive analytics

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