

Proceedings of the 2<sup>nd</sup> Annual World Conference  
of the Society for Industrial And Systems Engineering  
Las Vegas, NV, USA  
November 5-7, 2013

## **Predictive Maintenance of HVAC Systems**

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**Abstract:** Heating, Ventilation and Air Conditioning (HVAC) systems are most essential for smooth operation of any enterprise. HVAC system failure can cause significant financial loss and/or collateral damage. In order to avoid catastrophic failures and to maintain appropriate environment for equipment and personnel, a predictive maintenance strategy is required. Such strategy can also reduce overall cost of maintenance and extend infrastructure life. This paper presents an approach to predictive maintenance of a HVAC system. It includes continuous data collection, database development, system components identification, fault tree construction, risk assessment, and predictive maintenance plan development.

*Keywords: Predictive Maintenance, HVAC, Fault Trees, Database*