## **OSU**

## **INTEGRATIVE PREDICTIVE DIAGNOSIS**

for Structure Autonomy

Gary G. Yen, 405-744-7743
School of Electrical Engineering



Sensor Suite

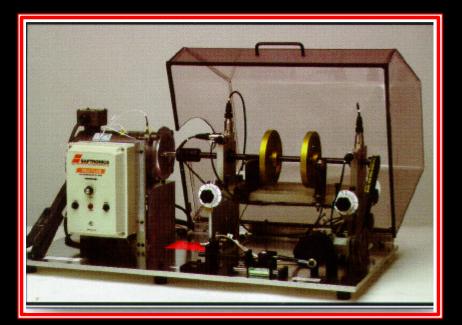
Noisy Environment Integrated Sensor Processor

Sensor Validation Time/
Frequency
Feature
Extraction

Wavelet Packet
Transform

Feature Selection

Data Compression



Expert
Knowledge
Representation
& Capture

A T U R U O C N T O U M R Y E

Switching Turning Adaptation

On-line Real-time Learning Controller nominal

Controller failure mode

Controller failure mode n

Multi-Model Control Fuzzy-Neural Classifier

Incremental Learning & Forgetting

