RELIABILITY ANALYSIS USING FUZZINESS OF REAL-TIME BASED INDUSTRIAL PROCESSES

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About Me

- MSc (Industrial Mathematics and Informatics) from IIT Roorkee
- PhD (Reliability Analysis of Industrial Systems Using GA and Fuzzy Approach) from IIT Roorkee
- Joined ABV-IIITM Gwalior on July 6, 2009

Area(s) of Specialization

- Theory of Reliability
- Optimization Techniques
- Soft Computing Techniques (GA, PSO, ACO & ANN)
- Fuzzy Sets and Fuzzy Logic
- Modeling tools (Petri Nets and Fault Trees)

Earlier Work

- Reliability of Industrial Systems in terms of Modeling, Evaluation, and Optimization
- Redundancy Allocation
- Cost Optimization
- Risk Analysis

Plan for Future Collaborative Work

- Distributed Systems
  - Quality of Service (QoS) based distributed systems
  - Web Service based distributed system

Contd...

- ▶ Computer Network
  - ▶ Modeling and Analysis of Viruses
  - ▶ Its Behavior and impact on Economy and society at large
  - ▶ Quality of Service (QoS) based data communication

Contd...

- ► Reliability
  - ► Software reliability modeling
  - ► Fault detection in Computer Networks

Requirements

- A Computer Lab,
- Software
    - RGA (Reliability Growth Analysis)
    - RCM++ (Reliability Centered Maintenance)
    - SmartDraw
    - MATLAB
    - MATHEMATICA
    - SPNP
    - SHARPE, etc.

Thank You