



BVRIT HYDERABAD College of Engineering for Women
(UGC Autonomous Institution | Approved by AICTE | Affiliated to JNTUH)
(NAAC Accredited – A Grade | NBA Accredited B. Tech. (EEE, ECE, CSE and IT))
Bachupally, Hyderabad -500 090

Event Report

**Title of the Event: Online Distinguished Lecturer (DL) Talk on
“Systems Engineers and Managers Can No Longer Ignore These 6 Areas of Change”**

Online Distinguished Lecturer (DL) Talk

Date: 17th February 2026

Time: 7:30 PM IST

Mode: Online (Google Meet)

The IEEE BVRIT HYDERABAD Student Branch in association with the IEEE BVRIT Hyderabad Systems Council successfully organized an **Online Distinguished Lecturer (DL) Talk** on 17th February 2026 at 7:30 PM IST.

The event was hosted under the aegis of BVRIT Hyderabad College of Engineering for Women. The session featured distinguished speaker **Dr. John E. Blyler**, Founder and President of JB Systems Tech, USA.

Number of Participants

A total of **45 participants** attended the session, comprising:

- Undergraduate students
- Postgraduate students

The participants belonged to the domains of **Electrical and Electronics Engineering and allied interdisciplinary areas**.

Faculty Coordinator

- **Prof. Saikumar Tara**
Department of ECE
IEEE BVRIT HYDERABAD Student Branch Counselor

Student Coordinators

- IEEE BVRIT HYDERABAD Student Branch Executive Committee Members
- IEEE Systems Council Student Volunteers

Overview of the Session

Dr. John E. Blyler delivered an insightful and thought-provoking lecture focusing on the rapidly evolving landscape of systems engineering and management. He emphasized the critical need for systems engineers and technical managers to adapt to emerging technological, organizational, and global challenges.

The talk highlighted six major transformative areas impacting systems engineering practice, including:

- Rapid digital transformation and AI integration
- Increasing system complexity
- Model-Based Systems Engineering (MBSE) adoption
- Cybersecurity considerations in system design
- Global collaboration and distributed engineering
- Sustainability and ethical responsibility in engineering

Dr. Blyler explained how these changes are reshaping traditional engineering roles and stressed the importance of interdisciplinary knowledge, leadership skills, and continuous learning.

Key Takeaways

- Systems engineering is transitioning from document-centric to model-centric approaches.
- Engineers must integrate technical expertise with managerial and strategic thinking.
- Adaptability and lifelong learning are essential in the modern engineering ecosystem.
- Organizations must proactively respond to technological disruptions.

Participation and Interaction

The session witnessed active participation from faculty members, IEEE student volunteers, and undergraduate and postgraduate students. The interactive Q&A session allowed participants to clarify their doubts and gain deeper insights into career pathways in systems engineering.

Conclusion

The Distinguished Lecturer Talk was highly informative and intellectually enriching. It provided valuable global perspectives on current and future trends in systems engineering. The session greatly benefited students and faculty by exposing them to international best practices and industry expectations.

The IEEE BVRIT Hyderabad Student Branch and Systems Council extend their sincere gratitude to Dr. John E. Blyler for delivering an impactful session and inspiring the academic community.



Signature of Coordinator:
Saikummar Tara



IEEE Systems Council



**IEEE BVRIT HYDERABAD Student Branch In association with
IEEE BVRIT HYDERABAD Systems Council
Presents
Online Distinguished Lecturer
17th February 2026**



**Dr John E. Blyler
JB Systems Tech, USA**



**DL Talk on “Systems Engineers and Managers Can No Longer Ignore These 6 Areas
of Change**

at 7:30 PM IST through Google meet: meet.google.com/rmb-vwxq-kne

Meet - rmb-vwq-kne - Google Chrome
meet.google.com/rmb-vwq-kne?authuser=0

John Blyler (Presenting)

7:39 PM | rmb-vwq-kne

Complexity is Non-Linear (Beyond a certain "magic" point)

Example: IOT Requires SOS Engineering

- Increasing interconnections between independent components or subsystems leads to more complexity and chance for system failures.
- Metcalf's Law:
 - Three interconnected components result in a maximum of three interconnections
 - Four interconnected components results in a maximum of six interconnections
 - Ten interconnected components results in a maximum of 45 interconnections
 - Millions or billions of interconnected things on the Internet will result in how many interconnections?
 - Very high rate of complexity
- "Engineering complexity, particularly in the context of nonlinear systems, is often non-linear."

Electronic Design: "Will Moore's and Metcalf's Laws Doom the IoT to the Darkroom Fate?", John Blyler

2/17/2026

People

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IN THE MEETING

Contributors 39

Sai Kumar Tara (You) Meeting host

AKSHARA BUGATHA

AKSHARA KATAKAM

AKSHITHA GINJALA

ANUHYA GADDAM

BHAVANA VANKAM

Bhavika Anikem

DILLISWARI P

GEETHA PRAJWALA RA...

7:39 PM 2/17/2026

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John Blyler (Presenting)

7:43 PM | rmb-vwq-kne

SE Modeling Trends

- Digital Thread & Digital Twin Integration
- Model-Based Systems Engineering (MBSE) Adoption
- Interdisciplinary Modeling Integration
- AI-Assisted Modeling
- Modular and Reusable Models

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John Blyler (Presenting)

Participants: SHRAVANI PATLO..., Bhavika Ankem, ROSHINI YERRAB..., AKSHARA KATAK..., BHAVANA VANKA..., 36 others, Sai Kumar Tara

Importance of Sustainability in Tech Manufacturing

Category	Why It Matters	Examples of Tasks
Resource Efficiency & Cost	Reduces material and energy use; lowers costs; improves resilience to shortages	Material recycling, energy optimization, water reuse, lightweighting
Environmental Impact & Compliance	Avoids pollution and emissions; meets regulatory standards	RoHS/REACH compliance, emission reduction programs, waste minimization
Supply-Chain Resilience	Reduces dependency on volatile resources; improves availability of key inputs	Circular economy loops, ethical sourcing of rare earths, local suppliers
Product Lifecycle Responsibility	Addresses use-phase and end-of-life impacts; reduces e-waste	Design for recyclability, modular design, take-back/reuse programs
Reputation & Market Differentiation	Enhances brand, meets customer/investor ESG expectations	Sustainability certifications, transparent reporting, eco-labels

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John Blyler (Presenting)

Participants: SHRAVANI PATLO..., Bhavika Ankem, ROSHINI YERRAB..., AKSHARA KATAK..., BHAVANA VANKA..., 34 others, Sai Kumar Tara

INCOSE SE and PM Competencies

Technical Competencies

- Requirements Definition
- Systems Architecting
- Design for...
- Integration
- Interfaces
- Verification
- Validation
- Transition
- Operation and Support

Systems Engineering Management Competencies

- Planning
- Monitoring and Control
- Decision Management
- Concurrent Engineering
- Business and Enterprise Integration
- Acquisition and Supply
- Information Management
- Configuration Management
- Risk and Opportunity Management

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John Blyler (Presenting)

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Trends and New Terminology

2025 Top 10 Strategic Technology Trends

The diagram illustrates three main categories of technology trends for 2025:

- AI imperatives and risks**
 - Agentic AI
 - AI Governance Platforms
 - Disinformation Security
- New frontiers of computing**
 - Post-Quantum Cryptography
 - Resilient Invisible Intelligence
 - Energy Efficient Computing
 - Hybrid Computing
- Human-machine synergy**
 - Spatial Computing
 - Polifunctional Robots
 - Neurological Enhancement

Gartner

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- BHAVANA VANKAM
- Bhavika Ankem
- DILLISWARI P
- HARSHITHA KANUMURI
- LEKHA RITHVI B

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Gold -2.42%

8:26 PM 2/17/2026

Participants (39):

- John Blyler
- SHRAVANI PATLOLLA
- Bhavika Ankem
- ROSHINI YERRABACH...
- AKSHARA...
- SAIKUM...
- BHAVANA VANKAM
- HEMA PRIYA BOLLU
- AKSHARA...
- AKSHITHA GINJALA
- MEENAKSHI BANOTH
- HRUTHIKA KALIDINDI
- NITHISHA DEVI CHEK...
- TARUNI SRI G
- SRINIDHI DANTOJU
- SRI GAYATRI MANOG...
- SANVI GUPTHA
- SHIVANI PANDULA
- KEERTHANA CHIRRA
- ANUHYA GADDAM
- SANIA MUBEEN SA...
- HARSHITHA KANU...
- SOWGANDIKA KU...
- SAI ANUSHKA RA...
- RENUKA KANCH...
- Raghav...
- LAKSHMI MANAS...
- JYOTHRIMAI GOD...
- VARSHITHA BURIDI
- LAVANYA PALLA...
- PRATHIBHA BUTTA
- LASYA NAGAVALL...
- BRINDA ALLAPUR...
- PAVANI PARVEDA
- KOTHAKAPU KAR...
- LAKSHMI SAMHI...
- VYSHNAVI KOLA...
- AKSHAYA JILLAP...
- Sai Kumar Tara