

SISE 2018 TENTATIVE CONFERENCE PROGRAM (as of October 2, 2018)

Date	Time	Event	
Thursday 10/11/2018	8:00 am - 12:00 pm	SISE 2018 Registration	
	8:30 am	Welcome Session	
	8:45 am - 9:15 am	Keynote Speech by Dr. Krishnaswami Srihari, Engineering Dean - Binghamton University, Binghamton, NY	
		Speech Title: "Internationalization and its Influence on Engineering Education"	
	9:15 am - 9:30 am	Coffee Break	
		ES2008E	ES2008W
	9:30 am - 10:45 am	Session 1	Session 2
		Human Factors, Ergonomics &	Other IE Topics - I
	10:45 am - 12:00 pm	Session 3	Session 4
		Optimization	Other IE Topics - II
	12:00 pm - 1:30 pm	Lunch Break	
	1:30 pm - 2:45 pm	Session 5	Session 6
		AI and Data Mining	IE Applications in Military - I
	2:45 pm - 3:00 pm	Coffee Break	
	3:00 pm - 4:15 pm	Session 7	Session 8
Process Improvement		IE Applications in Military - II	
4:15 pm - 4:30 pm	Coffee Break		
4:30 pm - 5:15 pm		ISER Editorial Board Meeting	
6:30 pm - 8:30 pm	SISE 2018 Dinner Banquet		
	Keynote Speech by COL Ricardo Morales, Department Head Systems Engineering, United States Military Academy, West Point, NY		
	Speech Title: "Systems Leadership: A Multi-Sector Perspective on Systems Design, Innovation and Management"		
Friday 10/12/2018	8:00 am - 10:00 am	SISE 2018 Registration	
		ES2008E	ES2008W
	9:00 am - 10:15 am	Session 9	Session 10
		Manufacturing and Production Systems	Other IE Topics - III
	10:15 am - 10:30 am	Coffee Break	
	10:30 am - 11:45 am	Session 11	Session 12
Simulation and SCM		Statistics in IE	
11:45 am	Conference Adjourns		



Krishnaswami (Hari) Srihari, Ph.D.

Executive Vice Provost for International Initiatives and Chief
Global Officer

Dean and SUNY Distinguished Professor – Thomas J. Watson
School of Engineering and Applied Science

Binghamton University – State University of New York,
Binghamton, NY 13902-6000, USA

Biography

SUNY Distinguished Professor Hari Srihari was appointed Dean of the Thomas J. Watson School of Engineering and Applied Science at Binghamton University in June 2009. He joined the faculty of the Watson School in 1988. Prior to his appointment as Dean, Dr. Srihari served the chair of the Department of Systems Science and Industrial Engineering (SSIE). He has played a key role in the creation of university-industry partnerships as Director of the Watson Institute of Systems Excellence (WISE). Recently, Dr. Srihari was appointed as Executive Vice Provost for International Initiatives and the Chief Global Affairs Officer for Binghamton University. He is also a fellow of the Institute of Industrial and Systems Engineering.

Dr. Srihari earned his bachelor's degree with honors in production engineering from the University of Madras, India and his master's and doctorate in industrial engineering and operations research from Virginia Polytechnic Institute and State University (Virginia Tech). He has directed and graduated over 170 MS graduate students and over 40 students at the PhD level. His research team includes over 80 graduate students, and he has secured over \$ 45 million dollars in external sponsorship.



Colonel Rich Morales

**Professor & Head, Department of Systems Engineering,
United States Military Academy, West Point, NY, USA**

Colonel Rich Morales leads the Department of Systems Engineering at West Point. He works alongside military and civilian scholars who are passionate about teaching complex problem solving and decision making to cadets while also working to help solve Army and DoD problems of national significance through engaged scholarship. Rich has taught courses in systems design, project management, engineering economics, and dynamic systems analysis. He serves in a variety of cadet and faculty mentorship roles.

Rich studied aerospace engineering at West Point, strategic studies at the Naval College of Command & Staff (Mahan Scholar), and resource strategy at the National Defense University. He is a Yale MBA and explored complex service system design in the UK MOD and defense industry as part of his doctoral work at Cambridge University's Centre for Strategy and Performance.

He works to apply systems thinking to formulate strategy and improve decision-making. He has advised senior leaders across the defense sector and leading private sector firms to better understand complex systems and performance improvement. Rich co-authored a chapter in a book on defense transformation, served on a National Academy of Science classified review of unmanned aerial systems in combat, and has led client-based research in support of Army priorities in partnerships with DARPA, DTRA, ERDC, and the Army Secretariat.

As an analyst in the Operations Research Center at West Point he helped develop the Army's pilot program for the privatization of utilities on military installations and later worked on improving performance measurement systems at the Pentagon. He served in the Executive Office of the President, twice: First at OMB and later on a small team tasked to design the new Department of Homeland Security, and a decade later, as a policy advisor to the President on military and veteran employment, education and wellness. As Special Assistant to the head of NASA he helped lead in an Agency-wide effort to adapt to new roles, missions, technology, and talent.

Colonel Morales is a first-generation American born in El Paso, Texas. He met his wife Christy in kindergarten. They work to keep up with an active 8-year-old son. Rich enjoys mentoring youth, developing new approaches to STEM education, and outreach to underserved communities. He considers it a privilege to be a part of a community of scholars at West Point who are committed to developing leaders who are systems thinkers.

Session	Paper Seq	Session Title	Paper Title	All authors
1	1	Human Factors, Ergonomics, & Safety	A Psychophysical Approach for Predicting Maximum Voluntary Contraction in Jordanian Cancer Patients at King Hussein Cancer Foundation Centre	HA Almomani, NN Nagarur, A Khazaleh, A Bashir, M Jarah, and O Mnaizel
	2	Human Factors, Ergonomics, & Safety	Exploring the Effect of Fatigue on Pilot Performance During Single and Multi-Takeoffs and Landings Flight Missions	S Naeeri, Z Kang, and S Mandal
	3	Human Factors, Ergonomics, & Safety	Workplace Risk Perception Between Mexican-Migrant and Mexican-American Construction Workers	G Ibarra-Mejia and KG Gomez-Bull
	4	Human Factors, Ergonomics, & Safety	Measuring Occupational Safety Climate and Safety Performance using the Nordic Safety Climate Questionnaire	B Baertschi, SD Choi, and K Ahn
2	1	Other IE Topics - I	A Predictive Framework to Identify Potential Diversion by Health Care Providers	K Vavonese, X Shan, and MT Khasawneh
	2	Other IE Topics - I	Item-Based Collaborative Filtering of Movies Based on Mutual Information	D Bani-Hani, A Ogale, I Chakrabarty, and K Thibault
	3	Other IE Topics - I	The Performance Determinants of Re-Startup and the Credit-Problem	S Kim and T Yang
	4	Other IE Topics - I	The Next Big Thing. What is it?	NF Schmeidler
3	1	Optimization	Cost Minimization of Balanced Mix for Cattle Feed	P Gómez-Fuentes, EP Puente-Aguilar, AM García-León, and AY Aguilar-Villarreal
	4	Optimization	Optimization of Dynamic Wireless Charging in Binghamton University Bus Network: Optimal Locations and Battery Size	AF Khalaf, KK Jain, A Noutiyal, and Y Wang
	2	Optimization	The Selection of the Optimal Load Dispatch for Electric Generation Systems Using Ant Lion Optimization: A Comparison Approach	A Alzu'Bi
	3	Optimization	Enhanced Methodology for Call Center Agent Scheduling Utilizing Erlang C and ANFIS	H Kaylani, A Atieh, M Al-Samhoury, L Zaid, H Walid, and M Twall
4	1	Other IE Topics - II	A Mixed-Integer Programming Approach for Managing Flow of Students in a Medium-Sized College	E des-Bordes and V Chakrapani
	3	Other IE Topics - II	The Development of a Project of Facility Design to Achieve a Specific Student Outcome for a Program of Industrial Engineering Credited by ABET	JM Hernández-Ramos, CS Peña, J Cuellar-Celestino, JD Velázquez-Martínez, SG Elizondo-Arroyave, and EP Puente-Aguilar
	2	Other IE Topics - II	Predictor Model of the Organizational Culture in a Multi-National Industrial Plant in Ciudad Juárez, México	AS Delgado, ER Poblano-Ojinaga, R Romero-López, EA Martínez-Gómez, and SA Noriega-Morales
	4	Other IE Topics - II	Maintenance Scheduling for an End-Effector of an Industrial Robot with the Aid of Influence Diagrams	M Kempf, AL Madsen, N Sondberg-Jeppesen, P Rocher, and I Thompson

Session	Paper Seq	Session Title	Paper Title	All authors
5	1	AI and Data Mining	Classification of Leucocytes Using Convolutional Neural Network Optimized Through Genetic Algorithm	D Bani-Hani, N Khan, F Alsultan, S Karanjkar, and NN Nagarur
	2	AI and Data Mining	Predicting Common Vulnerability Scoring System (CVSS) Scores Using Temporal Metric and Probabilistic Neural Network (PNN)	T Bardhan and G Jones
	3	AI and Data Mining	Analyzing Staff Experience Feedback Using Text Mining	R Shabbar, SC Madathil, S Poranki, and M Khasawneh
	4	AI and Data Mining	Predicting Post-Operative Survivability of Lung Cancer Patients: A Data Mining Approach	AF Khalaf and Y Wang
	5	AI and Data Mining	Analysis of Forecasting of Demand Data Under the Impact of Social Media	KZ Kaylani and NN Nagarur
6	1	IE Applications in Military - I	A Case Study: Operationalizing Open-Source Intelligence on the Korean Peninsula	SC Song
	2	IE Applications in Military - I	A Systems Framework to Mitigate Small Arms Fire Vulnerability of Directed Energy Weapons Systems	JM Comstock Jr, BW Box, SO Jones, J Lee, MR Perdomo, and RJ Tucker
	3	IE Applications in Military - I	A Systems Analysis to Improve Missile Stockpile Reliability with Internet of Things Technology	JM Comstock Jr, N Ball, J Cassalia, P Kearney, and Z Mancini
	4	IE Applications in Military - I	Geospatial Point Density	P Evangelista and D Beskow
7	1	Process Improvement	Development of an Outsourcing vs. In-House Cost Estimation Tool to Minimize Waste	I. Pikula and D.L. Santos
	2	Process Improvement	Evaluating the Preparation of the Escobedo City Clinics to Implement the Principles of Lean Manufacturing to Improve their Customer Service	JM Hernández-Ramos, CS Peña, EP Puente Aguilar, JD Velázquez Martínez, J Cuellar-Celestino, and SG Elizondo Arroyave
	3	Process Improvement	Evaluation of Supply Premium Fuel Products PT. Pertamina (Persero) with DMAIC Method and Six Sigma	A. Romah
	4	Process Improvement	Reduction of Defects in Casting and Finishing Processes through DMAIC Phases	EP Puente-Aguilar, Ma De Los A Martínez-Mercado, RE Mata-Martínez, P Gómez-Fuentes, and A Vargas-Moreno
8	1	IE Applications in Military - II	An Exploratory Application of Systems Dynamics Modeling to Improve Cesarean Section Delivery Policies and Decision Making	B Thompson and C Woody
	2	IE Applications in Military - II	A Systems Engineering Approach to Improving Emergency Medical Services Provision	SF McCarthy
	3	IE Applications in Military - II	Using an Augmented Reality Human Machine Interface to Improve Depot Maintenance: A Business Case	D Newell, D Davis, D Lee, M Lysek, and J Snider
	4	IE Applications in Military - II	Testing and Evaluation Phase for the CH-47F Block II	H Gibson, T Davis, S Quillen, S Washle, and M Bernardino

Session	Paper Seq	Session Title	Paper Title	All authors
9	2	Manufacturing and Production Systems	Development of Computer Aided Machining (CAM) from Computer Aided Design (CAD)	S Domínguez Rueda, K Escamilla Salazar, and I Escamilla Salazar
	3	Manufacturing and Production Systems	Fuzzy Modeling for Diametric Overcut in ECDM Process	J Leyva-Bravo, P Chiñas-Sánchez, A Hernández-Rodríguez, P Pérez-Villanueva, G Galo-Hernández and R Martínez-Alvarado
	4	Manufacturing and Production Systems	Implementation of the Methodology of Growth Curves in the Machining of Superalloys	S Domínguez Rueda, I Escamilla Salazar and B González Ortiz
	5	Manufacturing and Production Systems	Modeling and Prediction of Welded Joints Lifetimes by GMAW Process Using Support Vector Regression	MA Fuentes-Huerta, DS González-González, and RJ Praga-Alejo
10	1	Other IE Topics - III	Detection of faults in manufactured parts by techniques of feature extraction and deep learning.	Y Basulto-Rodríguez, P Chiñas-Sánchez, JA Almeda-Rivas, and P Pérez-Villanueva
	2	Other IE Topics - III	A survey of advanced strategies and intelligent techniques for peg-in-hole assembly	J Bermúdez-Gil, P Chiñas-Sánchez, E Carrum, and P Pérez-Villanueva
	3	Other IE Topics - III	Decision Tree-based Rules Extraction to Predict Breast Cancer Using Clinical Stage as a Dependent Variable	H Saad and N Nagarur
	4	Other IE Topics - III	Image Recognition System and Inference of Actions of a Robotic Arm in an Unstructured Environment.	A Morejón
11	1	Simulation & SCM	Supply Chains in Food Industry: Challenges and Opportunities	KZ Kaylani and NN Nagarur
	2	Simulation & SCM	Industry 4.0 Trends, Costs and Movements Optimization Using Simulation Software in an Automotive Industry Company	DC Bacre-Guzman, JA Chi, MA Martínez, NM Leal, AK Garza, and YV Morales
	3	Simulation & SCM	Predictor Model of the Supply Chain Effectiveness Based on Critical Success Factors	SA Noriega Morales, S Michel da Gama, J A Hernández, E Martínez Gómez, VA Torres
	4	Simulation & SCM	Evaluation of Line Feeding Process on engine automotive production considering variable demand through simulation	A Luevano-Celestino, E Carrum, and D Young
12	1	Statistics in IE	Data Analysis of life times through a Weibull Regression Model	DC Bernal-Iznaga, DS González-González, AF Miranda-Pérez, and RJ Praga-Alejo
	2	Statistics in IE	An Empirical Attribute Control Chart for Small Samples Sizes	E Ramírez-Méndez, RJ Praga-Alejo, and DS González-González
	3	Statistics in IE	Fuzzy weibull control chart to monitor the uncertainty generated by insufficient sample size	D Cruz García, MA Fuentes-Huerta, DS González-González, and RJ Praga-Alejo
	4	Statistics in IE	Non-Parametric Regression to Predict Retained Austenite in HAZ Welded Joints Considering A Small Sample	DS González-González, RJ Praga-Alejo, VH López-Cortez, RB Ojeda-Castañeda, JA Alonso-Martinez, and J Gaytán-Coronado