



International Symposium

On

Computational Mathematics, Optimization, and Computational Intelligence (CMOCI 2017)

IIT Indore
July 17- 19, 2017

(KT: Keynote Talk, PT: Plenary Talk, IT: Invited Talk)

Day 1

Time	Sessions
8:00 a.m.	Breakfast and Registration
9:00 a.m.	Inaugural Ceremony
9:30 a.m.	High Tea
10:00 a.m.	KT-1: Granular Data Mining and Uncertainty Modeling: Concepts, Features and Applications Speaker: Sankar K. Pal Chairman: S. Sundar
11:00 a.m.	PT-1: A Perfect Absorbing Layer From Inside-out Invisibility Cloak for High-order Simulations of Scattering Problems Speaker: Wang Li-Lian Chairman: Sankar K. Pal
11:50 a.m.	Tea
12:10 p.m.	PT-2: Computational Acceleration on Finite Pointset Method (FPM) for Flow Problems: Limitations and Challenges Speaker: S. Sundar Chairman: Wang Li-Lian
1:00 p.m.	Lunch
2:00 p.m.	IT-1: Metaheuristics for Optimization: Recent Trends and Future Directions Speaker: Millie Pant Chairman: Kapil Ahuja

2:30 p.m.	IT-2: Amalgamation of Textual and Structural Data for Deeper Insight – A Graph-Theoretic Approach for Social Media Data Analytics Speaker: Muhammad Abulaish Chairman: Millie Pant
3:00 p.m.	Tea
	3:20 p.m. – 4:00 p.m. Session for Contributed Talks Chairman: Muhammad Abulaish
4:00 p.m.	Departure for Dinner

Day 2

Time	Sessions
8:00 a.m.	Breakfast
9:00 a.m.	KT-2: Optimisation by Differential Evolution Speaker: P. N. Suganthan Chairman: Wang Li-Lian
10:00 a.m.	PT-3: Optimization Algorithms for Large Scale Machine Learning Speaker: Shirish Shevade Chairman: Naveen Garg
10:50 a.m.	Tea
11:10 a.m.	PT-4: Online Scheduling Speaker: Naveen Garg Chairman: P. N. Suganthan
12:00 p.m.	IT-3: Stream Data Mining: Platforms, Algorithms, Performance Evaluators and Research Trends Speaker: Sonali Agarwal Chairman: Aruna Tiwari
12:30 p.m.	Lunch
2:00 p.m.	IT-4: Numerics of Navier Stokes Equations of Motion in terms of Streamfunction Speaker: Ranjan K. Mohanty Chairman: Shirish Shevade
2:30 p.m.	IT-5: Application Specific Instruction Set Processor (ASIP): Design Methodology and Design Issues Speaker: Ravi Saini Chairman: Ranjan K. Mohanty
3:00 p.m.	IT-6: FPGA-based Smart Camera System Design Speaker: Sanjay Singh Chairman: Ravi Saini

3:30 p.m.	<i>Tea</i>
3:50 p.m.	PT-5: Few Concepts from Linear Algebra and their role in Machine Learning Problems Speaker: Aparna Mehra Chairman: Muhammad Abulaish
4:40 p.m.	<i>Tea</i>
5:00 p.m. – 6:00 p.m. Session for Contributed Talks Chairman: Aparna Mehra	
7:30 p.m. onward Dinner & Interaction Venue: School Building	

Day 3

Time	Sessions
8:00 a.m.	<i>Breakfast</i>
8:50 a.m.	KT-3: Spiking Neural Networks: Understanding and Modelling the Human Brain Speaker: Suresh Sundaram Chairman: Wang Li-Lian
9:50 a.m.	PT-6: Non-iterative Methods for Classification and Time Series Forecasting Speaker: P. N. Suganthan Chairman: Suresh Sundaram
10:40 a.m.	<i>Tea</i>
11:00 a.m.	PT-7: Topological Modeling and Analysis of Complex Data in Biomolecules Speaker: Kelin Xia Chairman: Swadesh K. Sahoo
11:50 p.m.	PT-8: Mathematical Inverse Problems in Geophysics Speaker: Tong Ping Chairman: Kelin Xia
12:40 p.m.	<i>Lunch</i>
2:00 p.m.	IT-7: Computer-aided Diagnosis of Epilepsy from EEG Signals using Empirical Wavelet Transform Speaker: Ram Bilas Pachori Chairman: Sanjay Singh

2:30 p.m.	<i>Tea</i>
2:50 p.m. - 3:50 p.m. Session for Contributed Talks Chairman: M. Tanveer	
3:50 p.m.	<i>Closing Ceremony</i>

Contributed Talks

Day 1 (July 17, 2017)

Time	Session 1
July 17, 2017 3:20 p.m-4:00 p.m.	<i>Chairman: Prof. Muhammad Abulaish</i>
	Title: Towards Rumour Free Social Networks Speaker: Syed Omar Ali and Rifa Khan
	Title: Nearest Neighbor Search in High Dimensions using Dimension Selection and Outlier Clustering Speaker: Rupali Bhartiya
	Session 2
July 17, 2017 3:20 p.m-4:00 p.m.	<i>Chairman: Dr. Akhlat Iqbal</i>
	Title: No-Free-Lunch Theorems and Realistic Algorithms Speaker: Ashish Sharma
	Title: Fuzzy Clustering Based Feature Extraction Method for Mental Task Classification Speaker: Akshansh Gupta

Day 2 (July 18, 2017)

Time	Session 1
July 18, 2017 5:00 p.m-6:00 p.m.	Chairman: Prof. Aparna Mehra
	Title: A Novel Rank Aggregation Model for Institute Recommender System Speaker: Md Muzakkir Hussain
	Title: Robust Techniques for Improving the Effectiveness of Recommender Systems Speaker: Mohammed Wasid
	Title: Batch Block Optimization Framework to Solve Big Data Problems in Machine Learning Speaker: Vinod Kumar Chauhan
	Session 2
July 18, 2017 5:00 p.m-6:00 p.m.	Chairman: Dr. K.S. Nisar
	Title: Optimal Inequalities for Generalized Normalized δ -Casorati Curvatures of Semi-slant Sub-manifolds in Generalized Complex Space Form Speaker: Mehraj Ahmad Lone
	Title: An Application of Non-polynomial Cubic Spline Method for Solving Higher Order Boundary Value Problems Speaker: Shahna
	Title: Generalized Convexities on Riemannian Manifolds Speaker: Akhlad Iqbal
	Session 3
July 18, 2017 5:00 p.m-6:00 p.m.	Chairman: Prof. R.B. Pachori
	Title: Automated Detection of EEG Signal Based on Flexible Analytic Wavelet Transform with an Optimal Signal Length Speaker: D. Mamta
	Title: Data Exploration Simplified by User-driven Query Refinement and Result Ranking Speaker: Vikram Singh
	Title: Monitoring of Knee-joint Vibroarthrographic Signals using Dual-tree Complex wavelet Transform Speaker: Pragya Sharma

Day 3 (July 19, 2017)

Time	Session 1
July 19, 2017 2:50 p.m-3:50 p.m.	Chairman: Dr. M. Tanveer
	Title: Level Based Batch Scheduling Strategy with Idle Slot Reduction under DAG Constraints for Computational Grid Speaker: Mohammad Shahid
	Title: A Novel Class of Optimal Time-frequency Localized Biorthogonal Wavelet Filter Banks for Automated Identification of Epileptic Seizures Speaker: Manish Sharma
	Title: Modelling and Control of Pneumatic Pressure Regulation Using Fuzzy Fractional –Order Controller Speaker: K.S. Nisar
	Session 2
July 19, 2017 2:50 p.m-3:30 p.m.	Chairman: Dr. Manish Sharma
	Title: Availability Optimization of Roy Billinton Test System (RBTS) based on Inspection –Repair Model using Teaching Learning based Optimization Speaker: Aditya Tiwari
	Title: A Strategy for Obtaining Optimum Duration between Preventive Maintenance against dormant Failure Modes of Distribution System Employing Modified Shuffled-frog Leaping Algorithm Speaker: Aditya Tiwari
3:50 p.m.	Closing Ceremony