

Global Online FDP on Advanced Optimization Techniques and Hands-on with MATLAB/SCILAB

Time Table

Date :8th August to 19th August 2022

Date	Session I (4PM-5PM)		Session II (5.15PM-6.15PM)	Session III (6.30PM-7.30PM)	Session IV(7.45PM-8.45PM)
08-08-2022 (Monday)	3.45PM-4.15 PM	4.15PM-5.15PM	Module II : Prof. B. K. Panigrahi	Module I : Dr. S. J. Nanda	Lab I : Dr. Prashant K. Jain
	Introduction	Module I : Prof. G. Panda	Swarm Intelligence : Particle Swarm Optimization & Its Variants	Fundamentals of Classical Optimization Techniques	Introduction to MATLAB for Optimization Techniques
	Evolutionary Computation				
09-08-2022 (Tuesday)	Module II : Prof. G. Panda		Module II : Dr. J. C. Bansal	Module I : Dr. Ajit Ku. Sahoo	Lab II : Dr. S. J. Nanda
	Ant Colony Optimization		Artificial Bee Colony	Alternating direction multiplier method (ADMM) for optimizat.	Genetic Algorithm implementation in MATLAB
10-08-2022 (Wednesday)	Module II : Prof. Rajesh Kumar		Module II : Dr. Ila Sharma	Module I : Dr. Anil Kumar	Lab III : Dr. D. K. Kotary
	Differential Evolution (DE) and its variants		Cuckoo Search	Linear Optimization in Multi-rate Signal Processing	PSO, DE implementation in MATLAB
11-08-2022 (Thursday)	Module II : Prof. Rajesh Kumar		Module II : Dr. Arnapurna Panda	Module II : Dr. Gunjan Soni	Lab IV : Dr. Urvashi P. Shukla
	Quantum Entanglement use in Nature inspired optimization		Colliding Bodies Optimization & Symbiotic Organism Search	Simulated Annealing and Tabu Search	MATLAB for Social Spider Optimization
12-08-2022 (Friday)	Module II : Prof. Kusum Deep		Module II : Dr. S. J. Nanda	Module II : Dr. J. C. Bansal	Lab V : Dr. Rahul K. Vijay
	Some open problems in Nature inspired optimization Techniques		CLONAL & Other Bio-inspired Optimization Algorithms	Comparing Nature Inspired Optimizers	MATLAB for Grey Wolf Optimization
13-08-2022 (Saturday)	Module III : Prof. B. K. Panigrahi		Module III : Dr. Swagatam Das	Module III : Dr. Sriparna Saha	Quiz-1
	Introduction to Multi Objective Optimization (MOO)		Statistical tests for single and multi objective optimization	MOO applications in Data Clustering	
14-08-2022 (Sunday)	Module III : Dr. Swagatam Das		Module III : Dr. P. M. Pradhan	Module III : Dr. Sriparna Saha	Lab VI : Dr. Rachana Gupta
	Constrained single and Multi-objective Optimization		MOO for Cognitive Radio & Sensor Network	MOO for Natural Language Processing	Multi-objecive NSGA-II programing with MATLAB
15-08-2022	<-----Independence Day, Monday, Holiday----->				
16-08-2022 (Tuesday)	Module III : Dr. S. J. Nanda		Module III : Rashi Gupta	Module III : Dr. Rachana Gupta	Lab VII : Dr. Rachana Gupta
	Multi Task Optimization		Dynamic optimization	Many Objective optimization	NSGA-III programing in MATLAB
17-08-2022 (Wednes day)	Module IV : Dr. J. C. Bansal		Module IV : Dr. Vasundhara	Module IV : Dr. Rahul K. Vijay	Lab VIII : Dr. ILA Sharma
	Swarm intelligence Applications in Drones		Application to Hearing Aid Design	Application to Seismic Data Processing	Programming for Optimization in Filter Design with MATLAB
18-08-2022 (Thursday)	Module IV : Dr. N. V. George		Module IV : Dr. T. Panigrahi	Module IV : Dr. S. S. Sahu	Lab IX : Dr. Urvashi Shukla
	Nonlinear System Identification : An optimization approach		Application to Indoor Localization in Wireless Sensor Networks	Application to Bioinformatics	Optimization in Hyperspectral Image Processing with MATLAB
19-08-2021 (Friday)	Module IV : Dr. N. V. George		Module IV : Prof. Rajesh Kumar	Module IV : Dr. J. P. Singh	Quiz-2
	Appln. to Audio Signal Processing		Appn. to Prob. of Electrical Engg.	Appln. in Social Media Mining	Feedback and Validation

Speakers Details :

- 1) Prof. Ganapati Panda, Fellow INAE, Fellow NSAI, Former Dy. Director and Prof. Emeritus, IIT Bhubaneswar
- 2) Prof. Bijaya Ketan Panigrahi, Dept. of Electrical Engineering, IIT Delhi
- 3) Prof. Kusum Deep, Dept. of Mathematics, IIT Roorkee
- 4) Dr. Swagatam Das, Electronics and Communication Sciences Unit, ISI Kolkata
- 5) Dr. Pyari M. Pradhan, Dept. of Electronics and Communication Engg., IIT Roorkee
- 6) Dr. Sriparna Saha, Dept. of Computer Science and Engineering, IIT Patna
- 7) Dr. Nithin V. George, Dept. of Electrical Engineering, IIT Gandhinagar
- 8) Dr. Jagdish Chand Bansal, Dept. of Mathematics, South Asian University, New Delhi
- 9) Dr. Ajit Ku. Sahoo, Dept. of Electronics & Comm. Engg., NIT Rourkela
- 10) Dr. Vasundhara, Dept. of Electronics & Comm. Engg., NIT Warangal
- 11) Dr. Jyoti Prakash Singh, Dept. Of Computer Science & Engg., NIT Patna (Coordinator)
- 12) Dr. Trilochan Panigrahi, Dept. of Electronics & Communication Engg., NIT GOA
- 13) Dr Prashant K. Jain, Dept. of Mechanical Engg., IIITDM Jabalpur (Coordinator)
- 14) Dr. Anil Kumar, Dept. of Electronics & Communication Engg., IIITDM Jabalpur
- 15) Dr. Sitanshu Sekhar Sahu, Dept. of Electronics & Communication Engg., Birla Institute of Technology, Mesra
- 16) Dr. Arnapurna Panda, Centre of Data Sciences, Sikha 'O' Anusandhan University, Bhubaneswar
- 17) Dr. Rachana Gupta, Data Scientist, GROWEXX
- 18) Ms. Rashi Gupta, Post Graduate Engineer, Sterlite Technologies Limited
- 19) Dr. Urvashi Prakash Shukla, Dept. of Computer Science, Banasthali Vidyapith
- 20) Dr. Rahul Kumar Vijay, Dept. of Computer Science, Banasthali Vidyapith
- 21) Dr. Dinesh Kumar Kotary, Dept. of Electronics & Comm. Engineering, Institute of Engineering & Technology, Lucknow
- 22) Prof. Rajesh Kumar, Dept. of Electrical Engg., MNIT Jaipur
- 23) Dr. Gunjan Soni, Dept. of Mechanical Engg., MNIT Jaipur
- 24) Dr. Satyasai Jagannath Nanda, Dept. of Electronics & Communication Engineering, MNIT Jaipur (Coordinator)
- 25) Dr. Ila Sharma, Dept. of Electronics & Communication Engineering, MNIT Jaipur (Coordinator)