

January 1-31, 2017

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## Conference/Workshop/Seminar(s) Organized

Teachers are persuasive factors in education. The knowledge of a teacher needs to be shared to the world rather than to their students alone. Conferences, Workshops and Seminars are organized to share and discuss the knowledge on recent topics.

School of Computing Science and Engineering, VIT Chennai organized a winter School on "Computational Intelligence: Fundamental Theory & Practical Applications" in association with IEEE Computational Intelligence Society, IEEE CIS Madras Chapter during January 2-6, 2017. This workshop is sponsored by IEEE CIS.



The objective of the Winter school is to provide a platform for young researchers to experience the recent developments in the area of computational intelligence methods and its applications in diverse areas. This program provided an opportunity for young researchers to interact with eminent experts in CI and discuss their ideas.

The winter school had 14 presentations that broadly covered the topics specific to Computational Intelligence, Neural Networks, Fuzzy Logic, Evolutionary Computing, Deep Learning, Cyber Physical Systems, Image Processing, audio processing, data clustering and classification.



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On the first day of the Winter School during the inauguration Dr. Jagannathan Sarangapani, Missouri University of Science and Technology, USA gave the inaugural speech and Dr. N. Kumarappan, IEEE CIS Madras Chapter, Chennai delivered the special address. Presidential speech was delivered by our Chancellor Dr.G.Viswanathan, who emphasized the need for Computational Intelligence in the current Technical World.



Post the inauguration, on the first day of the Winter School, Dr. N. Kumarappan, Annamalai University, Chidambaram gave an introduction about the IEEE- CIS followed by eminent presentations by Dr. Jagannathan Sarangapani, Missouri University of Science and Technology, USA on the topic "A Novel Hybrid Reinforced Learning Approach and its Application to Optimal Control of Dynamic Systems" that provided an accessible indepth treatment of reinforcement learning and dynamic programming methods using function approximators.



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The next presentation was by Dr. Vaidehi Vijayakumar, Dean /SCSE, VIT University Chennai Campus on the topic "Computational Intelligence for Sensor Networks". She presented an overview of CI techniques used in remote healthcare using body sensor networks.

On the second day of the Winter School we had three presentations and a demonstration. The first presentation was by Dr. N. Kumarappan, Annamalai University Chidambaram on the topic "Computational Intelligence Applied to Micro Grid". He suggested a solution for Environmental Economic Dispatch problem using Cuckoo Search algorithm (CSA) method.

The second presentation was by Dr. T. Thyagarajan, Madras Institute of Technology Chennai on the topic "Computational Intelligence for Process Modeling and Control". He emphasized on process modeling and control systems with the aid of CI techniques.

The third presentation was by Dr. G. Saravana Kumar, Indian Institute of Technology Madras on the topic "Soft Computing Techniques for Computer Aided Diagnosis". He ensured that the Computer aided diagnosis using imaging improves the performance and confidence of radiologists and Soft computing techniques enhances the accuracy and reliablility of computer methods.

The second day of the winter school ended up with a demonstration by Ankush, Research Scholar in the domain of neural networks and fuzzy logic.



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The third day of the Winter school started with the presentation by Dr. A. Nayeemulla Khan, Professor, VIT University on the topic "Deep Learning", followed the presentation by Dr. R. Jagadeesh Kannan, Professor, VIT University on the topic, "Computational Intelligence Techniques in Cyber Physical Systems".

The third day ended with a panel discussion. The panel was composed of experts from Image processing, Big Data Analytics, Theory of Computation and Computational Intelligence. Each of them gave brief description about their domain and discussed about the latest trends and scope of research in their domain. The panel was chaired by Dr. L. Jeganathan, Professor, SCSE.

On the fourth day of the workshop, Dr. Narasimhan Sundararajan, Nanyang Technological University, Singapore on the topic "Meta-cognitive neural networks and its learning algorithm"

Dr. Suresh Sundaram, Nanyang Technological University, Singapore Spoke on Spiking Neurons and its learning algorithm.

Dr. R. Venkatesh Babu, Indian Institute of Science, Bangalore Spoke on Deep Learning – Theory and Principles.

Dr. Dipti Prasad Mukherjee,Indian Statistical Institute, Kolkata Spoke on Image Processing using Computational Intelligence Techniques.



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Panel discussion was held and need for quality publication and methodology for such publications were discussed. The panel was chaired by Dr.N.Kumarappan, Annamalai University, Chidambaram.



On the last day, Dr. Stefano Squartini, University of Marche Ancona, Italy was delivered a talk on Computational Audio Processing. Dr. Swagatam Das, Indian Statistical Institute Kolkata, gave a talk on Computational Intelligence Approaches to Data Clustering – Overview, Recent Advances and Future Challenges. Finally, Dr. Ponnuthurai Suganthan, Nanyang Technological University, Singapore was delivered a talk on Noniterative and Fast Learning methods for Classification. The total participation of this winter school event is 49.



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2017 @ **SCSE** 



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Photos: Speakers and participants of the winter school









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## **Collaboration Meeting**

School of Computing Science and Engineering continuously encourages the faculty, research scholars and students to interact with the reputed experts from foreign universities and industries.

A collaboration meeting was conducted between various UK universities and VIT Chennai on 25.1.2017 @ VIT Chennai.



The following collaboration activities possible were discussed during the meeting:

- Prof. Joseph Sathiaraj welcomed all the members and Ms. Sonu introduced the delegates from UK Universities to faculty members of SCSE.
- Dr. William Joseph Spring from University of Hertfordshire, specified the research areas in their university including Machine learning, Security, Software Engineering and Software Security. He highlighted on M.Sc courses offered by the university.
- Dr. Frans Coenen from University of Liverpool mentioned about M.Sc Projects and MSc Programmes, Online Learning and Virtual Class room that the university is offering. He specified that Machine learning, Text Mining, Algorithms, Artificial Intelligence, Robotics and networks are the major research areas.



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- Dr. Bogdan Ghita from Plymouth University mentioned the franchise programmes that they are offering in Srilanka. He encouraged on the joint PhD programme offered in their university.
- Dr. Christopher David McDermott from Gordon University specified about the staff exchange programme, funded PhD. The university is offering scholarship for student doing MSc. The mentioned that Big Data Analytics, Artificial Intelligence, Visualization, Human Computer Interaction, Security as their major research areas.
- Dr. Jennifer Muskett from Southampton Solent University mentioned that their university is offering vocational courses and providing scholarships for international students. They focus on the research areas such as security, Data Science, Human Computer Interaction, Visualization, Software Engineering, Security, Virtual Reality and Augmented reality.



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- Dr. Mario Kolberg from University of Stirling highlighted on the staff exchange programme that is offered in their university. They have research group in Optimization, Modelling of complex systems, Data Science, Security and Health care systems.
- Dr. David M.Williams from University of Surrey was focussed on the cyber security.
- Dr. Ian Wakeman from University of Sussex mentioned the research areas of Artificial Intelligence, Video Communication, Natural language processing and Semantics.
- Dr. Vaidehi Vijayakumar, Dean/SCSE, VIT Chennai honoured the delegates and briefed on SCSE and insisted on the possibilities of establishing joint research lab and publications.
- Dr. Neelanarayanan, Professor SCSE, VIT Chennai presented on the research and developments in SCSE.
- Dr. V. Vijayakumar Associate Dean/SCSE, VIT Chennai proposed the vote of thanks.



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## MoU signed

Signing of MoU's with reputed foreign universities enhance our school's strength. In this context, VIT SCSE Chennai signed a MoU agreement with Anyang Institute of Technology (AIT), China, on 18<sup>th</sup> January 2017.

This is an agreement between VIT University Chennai and AIT China, to explore the possibilities of joint twinning programmes in interdisciplinary areas of specialization. This agreement includes student and faculty exchange programmes and joint programmes in research, development and industrial practice.





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## MoU signed



In additions to that, this MoU help us to plan and handle the different academic programmes, courses, organization of seminars, workshops and conferences including the exchange of mutual experiences in teaching and research.



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#### **Faculty Meeting**

Organized by: Dr. Vaidehi Vijayakumar *Dean, SCSE* 

SCSE faculty meeting is scheduled and conducted on 18th January in AB1-311 @ 11am by Dean SCSE.

#### **Research Seminar Series**

The aim of the Research Seminar Series (RSS) is to explore and showcase the cutting edge research in emerging fields of computing science and Engineering. It is a weekly based event where in a research scholars of SCSE shall share their expertise and knowledge across a wide spectrum.

- 1. Mr. U. Vignesh, 14PHD1182, research scholar presented a seminar titled "Finding Regulatory Motifs in Biological Sequences and Suffix Tree Algorithm" on 3<sup>rd</sup> Jan 2017.
- 2. Ms. B. Durgalakshmi, 13PHD1040, research scholar presented a seminar titled "Review on breast cancer diagnosis" on 11<sup>th</sup> Jan 2017.
- 3. Mr. U. Vignesh, 14PHD1182, research scholar presented a seminar titled Motif Binding Pattern Discovery and Neighbor Joining Algorithm" on 18<sup>th</sup> Jan 2017.
- 4. Ms. Leela S ,14PHD1006, research scholar presented a seminar titled "Image Enhancement Techniques" on 25<sup>4h</sup> Jan. 2017.



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### **Doctoral Committee Meeting**

The Research Scholars (Internal Full Time/ Internal Part Time/ External Part Time) of VIT Chennai had their DC Meeting/Comprehensive Viva Voce as follows:

		Register Num-	
Research Supervisor	Research Scholar	ber	Date of Meeting
	Dhanashri Wategaon-		
Dr. Nandhini R	kar	16PHD1072	6/1/2017
Dr. Nandhini R	Prachi Kulkarni Sarode	16PHD1073	6/1/2017
Dr. Renta Chintala			
Bhargavi	Maya Gopal P S	16PHD1005	11/1/2017
Dr. Asnath Victy	Aarti Vipin		
Phamila Y	Deshpande	16PHD1071	12/1/2017
Dr. Ganapathy S	RIYAZ B	16PHD1026	13/1/2017
Dr. Ganapathy S	Prabhu Kavin B	16PHD1027	13/1/2017
Dr. Saleena B	N.Poornima	14PHD1104	16/1/2017
Dr. Ganapathy S	SUMA S G	16PHD1074	16/1/2017
Dr. Ganapathy S	KARTHIK R V	16PHD1088	16/1/2017
Dr. Jenila Livingston L M	Raamakirtinan S	13PHD1089	18/1/2017
Dr. Malathi G	S.Rajkumar	13PHD1097	27/1/2017
Dr. Vaidehi Vijayakumar	Mahajan Manjushri	16PHD1098	27/1/2017



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# Faculty Participation in Workshop/Seminar/ Development/Training Programmes

Learning is a life long activity. To equip themselves with the current trends of the industry, faculty members are encouraged to participate in workshops, seminars and conferences.

- 1. Dr. Nayeemulla Khan invited as a speaker for 5 days workshop on "IEEE Computational Intelligence" from 2/1//2017 to 6/1/2017 at VIT University, Chennai.
- 2. Prof. Thomas Abraham J V, Prof. Rajarajeswari S, Prof. Khadar Nawas K, Dr. Asha S, Dr. Pattabiraman V and Dr. Nayeemulla Khan, have participated in a 5 day workshop on "Computational Intelligence: Fundamental Theory & Practical Applications" from 2/1/2017 to 6/1/2017 at VIT University, Chennai.
- 3. Prof. Ilakiyaselvan N, participated in a 3 day workshop on "Computational Brain Research" from 5/1/2017 to 7/1/2017 at IC & SR Conference Hall II, ICSR building, IIT Madras, Chennai.
- 4. Prof. Sajidha S A, participated in a seminar on "Java IoT Developer Course Launch", organized by Oracle India Ltd. on 11/1/2017 at ITC GRAND CHOLA, Chennai.
- 5. Prof. Maheswari S, participated in a conference on "Advanced Computing and Communication Systems ICACCS 2017", in Coimbatore on 6/1/2017.



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#### **Guest Lectures**

To expose students to real-world life experiences, guest lectures from industry persons and senior academicians are arranged by the school. Guest speakers offer a different perspective to the students rather than from academic perspective.

1) Dr.V. Immanuel, Professor, Sethu Institute of Technology, gave a lecture on "Survival Strategies in a postmodern age" on 6<sup>th</sup> January, 2017.

Faculty Coordinator: Dr. Justus

2) Dr. Robin Doss, Deputy Head, School of Information Technology, Deakin University, Australia gave a lecture on "Emerging Cyber Security Trends" on 19<sup>th</sup> January, 2017.

Faculty Coordinator: Dr. Sweetlin

3) Dr. LambertBrau, Professor, Deakin University, Australia gave a lecture on "Overseas opportunities for B.Tech students" on 24<sup>th</sup> January 2017.

Faculty Coordinator: Dr.Subbulakshmi

4) Dr. Christopher David McDermott, Professor, Robert Gordon University gave a lecture on "Security on IoT" on 25<sup>th</sup> January 2017.

Faculty Coordinator: Dr.Nayeemulla Khan



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## Quality Circle Meeting—I

With the intent to strive for continuous improvement, QCM, convened by program chair and is conducted three times in a semester along with course faculty, and the student representatives to assess about the conduct of classes, scope for improvement and student-faculty interaction.

I year M.Tech / MS (SE)

- 27 th Jan.2017

II year M.Tech/MS(SE)

- 31<sup>st</sup> Jan.2017

III year M.Tech/MS(SE)

- 30<sup>th</sup> Jan.2017

IV M. Tech/MS(SE)

- 31<sup>st</sup> Jan.2017

B.Tech (I, II and III years)

- 27<sup>th</sup> Jan.2017

I year MCA

- 27<sup>th</sup> Jan.2017

I year M.Tech (CSE, Bigdata and Cloud)

- 27<sup>th</sup> Jan.2017

QCM Coordinator (MCA) - Dr. Nagaraj

QCM Coordinator (M.Tech Software) - Dr.Sweetlin Hemalatha

QCM Coordinator (M.Tech. CSE, CC, Bigdata) - Dr.Karmel

QCM Coordinator (B.Tech.) - Dr.Sakkaravarthi