



Department of General Education
Government of Kerala

Three-Days Residential Camp Workshop on Artificial Intelligence & Its Applications

Venue:

Kerala School of Mathematics (KSOM) - an institution
under KSCSTE, Govt. of Kerala, Kunnamangalam P.O.,
Kozhikode.

February 15 – 17 2019

Organize by



STATE INSTITUTE OF EDUCATIONAL TECHNOLOGY

In association with



CENTRAL UNIVERSITY OF KERALA

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Welcome Message

As part of State government's education rejuvenation mission, State Institute of Educational Technology (SIET) has embarked upon a series of new initiatives to bring up promising students to a level of international reckoning. Workshops on new technologies like Artificial Intelligence, Nano Technology and Bio Informatics are being conducted, SIET in association with Central University of Kerala and Kerala School of Mathematics conducting a workshop on artificial intelligence at Kerala School of Mathematics (KSOM) on 2019 February 15-17 for high school students. Artificial Intelligence & its Applications are included in this three days residential programme. There will be laboratory sessions and interactions.

We request your wholehearted support for the success of this programme.

Dr. Anitha A. B
Director KSOM

Shri B.Aburaj
Director SIET

State Institute of Educational Technology

State Institute of Educational Technology (SIET) Kerala is the premium institution in developing academic digital contents. The activities of the institute include trainings for teachers, development of ICT tools for enriching teaching learning process, talent hunt programmes for students, personality and career development camps, research, publications, on - line capacity building exercises for managing digital resources for teachers etc. All Kerala Educational Children's film festival of SIET is a major techno -

cultural event of the state. The executive committee, Minister for General Education as Chairman and Secretary, Gen. Education as Vice Chairman as director takes decision on the programmes and policies. SIET Kerala bagged five national awards for best digital contents in 2016, 2017 and 2018. SIET also develops on line courses for different universities.

Central University of Kerala

The Central University of Kerala (CUK) is one of the 15 new Central Universities established under "The Central Universities Act, 2009 (Act No.25 of 2009)". CUK aims to extend the scope of learning through a holistic methodology that accommodates diverse linguistic, scientific and cultural traditions. CUK is situated at Kasaragod, the northern-most district of Kerala and has state-wide jurisdiction. The permanent campus of the University is being set up at Periyar on a panoramic stretch of 310 acres of land beside the National Highway. Twenty-one academic departments as well as the administrative wings of the University are functioning in the permanent campus.

Kerala School of Mathematics

Kerala School of Mathematics (KSOM), an institution meant for advanced learning and research in Mathematics, is a joint venture of Kerala State Council for Science, Technology and Environment (KSCSTE), Government of Kerala and Department of Atomic Energy (DAE), Government of India. It is built in the traditional Kerala style architecture and is located in a picturesque setting surrounded by serene hillocks and lavish greenery. It is at a distance of about 15 km. from the seaside city Kozhikode in Malabar region of Kerala, India.

About the Workshop

Bringing together elements of computer science, engineering and cognitive studies, artificial intelligence (AI) is a branch of computer programming that programs computers to 'think' and act in certain ways in order to mimic human intelligence. Although involved in the creation of intelligent machines, artificial intelligence is largely concerned with the creation of intelligent computer programs that can be installed into machines. When talking of 'intelligence' in terms of computers, what's meant is really human perceptions of intelligence, such as the capacity to store information, solve problems, use reasoning, communicate and interact with the physical world. Applications of programmed intelligence include search engines, networking applications and to stop online fraud. This idea of artificial intelligence is still in its progressing stage, meaning the career potential may be greater than we can currently imagine.

We are planning to conduct a workshop on Artificial Intelligence & its Applications – three days residential camp, as part of the science enrichment program for the selected 9th standard Govt/Aided school students in each district. Subject area covered includes Artificial Intelligence, Internet of Things, and Mathematics in Artificial Intelligence.

Resource Persons

Dr. Srikanth N.S, Senior Scientist, Centre for Development of Advanced Computing (C-DAC), Bengaluru, Karnataka

Dr. R. Rajesh, Associate Professor, Department of Computer Science, Central University of Kerala, Kasaragod.

Dr. A. K Vijayarajan, Associate Professor & Director (i/c) of Kerala School of Mathematics (KSOM)

Dr. Thasleema T.M, Assistant Professor, Department of Computer Science, Central University of Kerala, Kasaragod.

Dr. Manikandan Rangaswamy, Assistant Professor, Department of Mathematics, Central University of Kerala, Kasaragod.

Dr. Shaini P, Assistant Professor, Department of Mathematics, Central University of Kerala, Kasaragod.

Dr. Gnanavel Sundararajan, Assistant Professor, Department of Mathematics, Central University of Kerala, Kasaragod

Coordinator

Dr. Manikandan Rangaswamy

Assistant Professor
Department of Mathematics
Central University of Kerala, Kasaragod

Joint Coordinator

Dr. Thasleema T M

Assistant Professor
Department of Computer Science
Central University of Kerala, Kasaragod

Technical Programme Committee

Shri B. Aburaj

Director, State Institute of Educational Technology (SIET), General Education Department, Govt. of Kerala

Dr. R. Rajesh

HOD & Associate Professor
Department of Computer Science
Central University of Kerala, Kasaragod

Dr. A. K. Vijayarajan

Associate Professor
Kerala School of Mathematics, Kozhikode

Dr. Shaini P

Assistant Professor
Department of Mathematics
Central University of Kerala, Kasaragod

Dr. Gnanavel Sundararajan

Assistant Professor
Department of Mathematics
Central University of Kerala, Kasaragod

Dr. T.V. Vimalkumar

State Programme Coordinator –Sastra Jalakam,
State Institute of Educational Technology (SIET)
General Education Department, Govt. of Kerala

Trainers

Mr. Fasil O K, Research Scholar, Department of Computer Science, Central University of Kerala, Kasaragod.

Mr. Shyamkrishnan M S, Research Scholar, Kerala School of Mathematics, Kozhikode.

Mr. Sreejith M M, Research Scholar, Kerala School of Mathematics, Kozhikode.

Mr. Abdul Jaleel, Research Scholar, Department of Mathematics, Central University of Kerala, Kasaragod.

Mr. Amith, M.Sc Student, Department of Computer Science, Central University of Kerala, Kasaragod.

Mr. Firoz Ahammed T, M.Sc Student, Department of Mathematics, Central University of Kerala, Kasaragod.

Ms. Greeshma, M.Sc Student, Department of Mathematics, Central University of Kerala, Kasaragod.

Mr. Hemand Harikumar, M.Sc Student, Department of Mathematics, Central University of Kerala, Kasaragod.

Mr. Prakash P, M.Sc Student, Department of Mathematics, Central University of Kerala, Kasaragod.

Ms. Ashwani K B., M.Sc Student, Department of Mathematics, Central University of Kerala, Kasaragod.

How to reach at KSoM:

*The KSoM is located at a distance of about 12Kms from the Kozhikode city centre (train/bus Stations) situated off the Kozhikode-Medical College-**Kunnamangalam** bus route. If you choose to travel from the city to KSoM by bus, catch one from the Palayam Bus Station (also known as the Old Bus Stand) going in the above route (there is a bus in about every 10 minutes) and get down at a bus stop called '**Mundikkalthazham**' which is a few stops after the more prominent Medical College Bus Stop. The KSOM is by the side of a bye lane leading to Peringolam from this bus stop and at a distance of about 2Kms. Alternatively you can take a bus from the Kunnamangalam Bus Station to 'Peringolam' and walk up a hill to reach KSoM.*

Note:

There is no registration fee. Food and accommodation will be providing at Kerala School of Mathematics, Kozhikode.



Day – 1 (15-02-2019)	
TIME	ACTIVITY
9.00 am	Registration
9.30 am-10.15 am	Inauguration & Tea break
10.30 am - 11.45 am	'Artificial Intelligence: Future Technology Perspectives' by Dr. Sreekanth N. S.
11.45 am – 1 pm	'Introduction to Internet of Things' by Dr. R. Rajesh.
1.00 pm -2.00pm	Lunch Break
2.00 pm – 3 pm	'Interactive Session' with Dr. A. K Vijayarajan, Associate Professor of Kerala School of Mathematics (KSOM).
3 pm – 3.15 pm	Tea break
3.15 pm – 4.30 pm	'Introduction to ALICE & SCRATCH - Enjoyable Programming (Practical session)' by Mr. Fasil O.K.
4.30 pm – 5.30 pm	'Getting Start with Robotic Programming- an inspiring talk ' by Devanand K*, 5 th Std. student, SFS Public School Bengaluru.
6 pm – 7.00 pm	'Cryptology- an introduction' by Mr. Sreejith M M
7 pm – 8 pm	Students Interaction with Resource Persons

Day – 2 (16-02-2019)	
9.15 am – 10.30 am	'Frontiers of Artificial Intelligence' by Dr. Thasleema T.M.
10.30 am – 10.45 am	Tea Break
10.45 .00 am- 12.00 pm	'Milestones in the history of MERSENNE PRIME SEARCH' by Dr. Shaini P.
12. 15 pm – 1.00 pm	'Hands on training with basics of Computer Science' by Mr. Fasil O K and Mr. Amith
1. 00 pm – 2.00 pm	Lunch Break
2.00 pm – 3.15 pm	'Hands on training with basics of Computer Science' by Mr. Fasil O K and Mr. Amith
3.15 pm – 3.30 pm	Tea break
3.30 pm – 5.30 pm	'Mathematical Excursion' by CUK-MATH & KSoM
6 – 8	Cultural Activities / General Awareness program etc
Day -3 (17-02-2019)	
8.30 am – 9.45 am	'Mathematical Logics in Artificial Intelligence' by Dr. Gnanavel Soundararajan.
9.45 am – 11.00 am	'Probabilistic Reasoning -an introduction' by Dr. Manikandan Rangaswamy.
11.00 am – 11.30 am	Tea Break
11.30 pm – 12.45 pm	'Mathematical Quiz' by Dr. Shaini P
1.00 p.m – 2.00 p.m	Lunch Break
2.00 p.m – 2.30 p.m	Photo Session
2.30 p.m – 3.30 p.m	Valedictory function & Certificate Distribution