

Course Contents

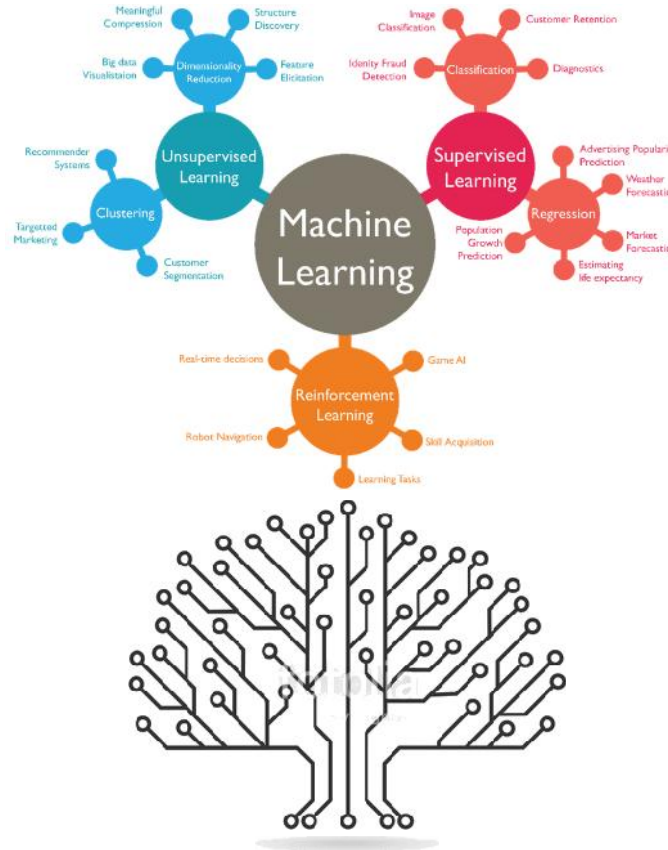
- ◆ Medical Imaging in current clinical practices and future Potentials
- ◆ Computer aided Diagnosis of medical Images – Research Perspectives
- ◆ Detection And Classification of Lesions In Retinal Images to Assess Diabetic Retinopathy using sequential Learning Methods
- ◆ An overview of computational intelligence techniques for retinal disease identification applications
- ◆ Deep Learning and Computer-Aided Diagnosis for Medical Image Processing
- ◆ An efficient approach to locate the optic disc center, blood vessels and Macula in retinal image
- ◆ Assessment and classification of retinal images using ant Colony optimization based hybrid methods and support vector Machines
- ◆ Analysis of Retinal Vasculature Abnormalities in human Retinal images and classification using Machine Learning Algorithms

RESOURCE PERSONS

Sessions will be handled by Experts from reputed Institutions and Hospitals on research focus of retinal diseases and challenges.

WHO CAN ATTEND??

Clinicians, Faculty from approved Government Institutions and Polytechnics, Research scholars and Engineering students with relevant background. Candidates from Industries and R&D organizations may also be considered on a self-supporting basis.



MACHINE LEARNING

Filled-in application form is to be sent to

Dr. M.PONNI BALA

Associate Professor

Department of Electronics & Instrumentation Engineering,

Chair Person,

National Seminar on

“COMPUTER-AIDED DIAGNOSIS OF RETINAL IMAGES (CADR) USING MACHINE LEARNING TECHNIQUES: INNOVATIONS AND RESEARCH PERSPECTIVES”

Kongu Engineering College, Perundurai,
Erode — 638 060. Tamilnadu.

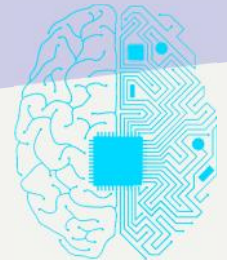
Mobile : 9843999554, 6380295536

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**KONGU ENGINEERING
COLLEGE
(Autonomous)
PERUNDURAI,
ERODE- 638 060 TAMILNADU**

**CSIR sponsored
National Seminar on**

**COMPUTER-AIDED DIAGNOSIS
OF RETINAL IMAGES (CADR)
USING MACHINE LEARNING
TECHNIQUES: INNOVATIONS
AND RESEARCH
PERSPECTIVES**



**Date:
14.06.2019
&
15.06.2019**

CHAIR PERSON

Dr. M.Ponni Bala

ORGANIZING SECRETARY

Mr. C.Aravind

Venue:

**Department of Electronics &
Instrumentation Engineering,
SES Block**

Preamble

One of the greatest concerns to the personnel in the current health care sector is the severe progression of diabetes. Diabetes affects circulatory system including retina. Diabetic Retinopathy (DR) is an eye disease that is associated with long-standing diabetes. Retinopathy can occur with all types of diabetes and can lead to blindness if left untreated. DR damages blood vessels inside the retina at the back of the eye. It



commonly affects both the eyes and can lead to vision loss if it is not treated in time. The majority of patients who suffer from DR have no symptom until the very late stages. Patients with diabetes need annual screening to prevent vision loss. Hence, systematic screening of targeted patients is necessary in identifying the cases for early diagnosis and treatment. However, the less number of ophthalmologists limit the number of patients to be examined. Medical image processing techniques and advanced detection

algorithms assist ophthalmologists in the examination process by automating the detection of abnormalities present in the retina.

Visual assessment of medical images is time-consuming, tedious and erroneous. Visual assessment can also result in inter and intra-observer variation. Hence, a Computer Aided Diagnosis (CAD) system that can overcome manual challenges is useful in performing diagnosis.

Application Form:

Name:
Designation:
Organization:
Gender:
Educational Qualification:
Address for Communication:
Mobile Number:
Experience: Field:_____ Years:_____
Accommodation Required: Yes / No
Demand Draft No.:
DD Date:
Bank Name:

BOARDING AND LODGING

Boarding and Lodging will be provided to all the selected participants in the college campus.

REGISTRATION DETAILS

Registration Fee: **Rs.300/-** per participant.

Registration for the course can be made by sending the duly filled registration form along with a DD for Rs.300/- in favour of "Kongu Engineering College - Grants", payable at Perundurai or Erode.

HOW TO APPLY

The applicants should send their applications in the specified format to reach us on or before **07.06.2019**.

DECLARATION:

The above information is true to the best of my knowledge. I agree to abide by the rules and regulations governing the course. If selected, I shall attend the programme for the entire duration. I also undertake the responsibility to inform the Organizing Secretary in case I am unable to attend the course.

Place:

Date: Signature of the Applicant

Registration can also be done through the following link:

<https://forms.gle/VDfeAkZ6AJGVwhxz7>