

## ABOUT THE INSTITUTION

**K.L.N. COLLEGE OF INFORMATION TECHNOLOGY** is the first Engineering College on Information Technology in Madurai, started in the year 2001 by the munificent of philanthropists and well-wishers in the Sourashtra Community, which is a linguistic minority in Tamil Nadu. The Institution is approved by A.I.C.T.E., New Delhi and is affiliated to Anna University, Chennai. The Department of Computer Science Engineering, Electronics and Communication Engineering and Information Technology are accredited by AICTE-NBA. The Institution is an ISO 9001-2008 certified for its quality educational management. The college offers 5 UG Programs and 4 PG programs in Engineering

## ABOUT THE DEPARTMENT

The Department of Electronics and Communication Engineering (ECE) was established in the year 2001 with the vision of developing the department as a Centre of Excellence in R&D, in the field of Electronics and Communication Engineering and make the students blossom into meritorious and self-disciplined engineers by hard work and M.E. - Communication and Networking programs. Highly dedicated and well qualified team of faculty members in the Department having considerable academic and research experience are striving their best to provide quality education. The department successfully completes AICTE-MODROBS project worth of Rs.8.5 Lacs received from AICTE for the modernization of Digital Signal Processing Lab. The department has MOU with BSNL and associated with Professional bodies like IETE, ISTE and EDC.

## TOPICS TO BE COVERED

In machine learning, **support vector machines (SVM)** are supervised learning models with associated learning algorithms that analyze data and recognize patterns, used for classification and regression analysis.

An SVM model is a representation of the examples as points in space, mapped so that the examples of the separate categories are divided by a clear gap that is as wide as possible.

### i) Linear SVM

The support vector machines can be classified as follows:

- Primal form
- Dual form
- Biased and unbiased hyperplanes

### ii) Determination of support vectors(linear)

The support vectors for primal linear form, dual linear form and biased and unbiased hyper planes will be determined

**Principal component analysis (PCA)** is a statistical procedure that uses an orthogonal transformation to convert a set of observations of possibly correlated variables into a set of values of linearly uncorrelated variables called principal components.

**Cross-validation**, also called **rotation estimation**, is a model validation technique for assessing how the results of a statistical analysis will generalize to an independent data set. It is mainly used in settings where the goal is prediction, and one wants to estimate how accurately a predictive model will perform in practice. The goal of cross validation is to define a dataset to "test" the model in the training phase in order to limit problems like over fitting, give an insight on how the model will generalize to an independent dataset etc.

## RESOURCE PERSONS

**1.Dr.R.Rajaram**

**Former Dean,HOD of CSE & IT**

**Thiyagarajar college of Engineering.**

**2. Dr.M.N.Suresh**

**Associate Professor**

**Thiyagarajar college of Engineering.**

**3. Dr.B.VijayaKumari**

**Associate Professor**

**Kamaraj College of Engineering & Technology, Madurai.**

**4.Dr.P.VenkataKrishnan**

**HOD of ECE**

**K.L.N.College of Information Tech., Madurai.**

**5.Dr.P.Vasuki**

**Associate Professor**

**K.L.N.College of Information Tech., Madurai.**

## How to Apply

The applicants should send their registration form in the specified format to reach us on or before 03.12.2015. Selected participants will be informed for conformation.



## K.L.N. College of Information Technology

Accredited by NBA-AICTE & Affiliated to Anna University

An ISO 9001:2008 Certified Institution

Pottapalayam, Sivagangai Dist, Tamilnadu-630611

### One Week Faculty Development Program

ON

**“Recent Research trends in SVM,PCA, CROSS VALIDATION, RECEIVER OPERATING CHARACTERISTICS (ROC)CURVE,WAVELET TRANSFORMS AND MANN-WHITNEY U TEST”**

13<sup>th</sup> -19<sup>st</sup> December 2015

#### REGISTRATION FORM

Name :  
Designation/Department :  
Institution :  
Qualification :  
Mobile :  
E-Mail :  
By cash Rs.: (or)  
DD No. :  
Date :  
Amount :  
Bank :

(DD drawn in favour of “The PRINCIPAL, K.L.N. College of Information Technology, Pottapalayam” payable at Madurai)

#### Declaration

This is to certify that Dr./Mr./Ms. \_\_\_\_\_ is a student/employee of our Institution/Industry and is sponsored to attend the one week faculty development program conducted by K.L.N.College of Information Technology during 13<sup>th</sup> to 19<sup>st</sup> December.

Place :  
Date :

(Signature)

Signature of applicant HOD/Head of Institution  
with office seal and date

### IMPORTANT DATES

Last date for receiving  
Completed registration form : **03.12.2015**

Intimation of selection by E-mail : **05.12.2015**

### COURSE FEE

Students : **Rs.1000/-**  
Faculty & Research scholars : **Rs.1500/-**  
Participants from Industry : **Rs.2000/-**

Registration fees include Lunch, Registration kit and certificates.

### CONTACT PERSONS

#### 1. Ms. B. Vijayalakshmi

Associate Professor / ECE

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#### 2. Ms. G. Rekha

Assistant Professor / ECE

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### ADDRESS FOR COMMUNICATION

The Convener,  
Department of ECE,  
K.L.N. College of Information Technology  
Pottapalayam  
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Website: [www.klncit.edu.in](http://www.klncit.edu.in)  
Phone: 0452-2092731,6562566

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**13<sup>th</sup> - 19<sup>st</sup> December 2015**

#### Chief Patron

**Dr. J.S. Gnanasekaran,  
Principal**

#### Convener

**Dr.P.Venkatakrisnan  
HOD/ECE**

#### Coordinators

**Ms. B. Vijayalakshmi, ASP/ECE  
Ms. G. Rekha, AP/ECE**

#### Organized by

**Department of Electronics &  
Communication Engineering**



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