AMAL JYOTHI
COLLEGE OF ENGINEERING
KANJIRAPPALLY, KOTTAYAM

SPONSOR

All India Council for
Technical Education

ORGANIZED BY

Department of
Computer Science
& Engineering

AICTE Sponsored

6

DAYS SHORT TERM
TRAINING PROGRAMME

DATA ANALYTICS AND MACHINE LEARNING

3 - 8 August 2020

www.amaljyothi.ac.in

About Amal Jyothi College of Engineering

Amal Jyothi College of Engineering has established itself as a benchmark of excellence in technical higher education and research. Founded in 2001 by the Catholic Diocese of Kanjirapally, Amal Jyothi is approved by the AICTE and affiliated to APJ Abdul Kalam Technological University (KTU), Kerala. It is the first new generation engineering college in Kerala with the prestigious NBA accredited departments and the first engineering college in Kerala with the recognition of 'A' grade from NAAC.

About CSE Department

The Department of Computer Science & Engineering moulds young outstanding engineers who are academically strong in both theory and practicals. It organizes many additional programs, which include Paper Presentations, Technical Seminars & Mock Interviews to prepare the student for a career in the computing field or for graduate study. Special orientation is provided to the staff periodically for updating their acumen and to imbibe the latest technological changes. The courses offered include B. Tech Computer Science & Engineering with an intake of 120 and M. Tech Computer Science & Engineering with an intake of 18 students.

Why Data Analytics & Machine Learning ?

In the 21st century, Data Analytics and Machine learning have revolutionized the way organizations work. The job opportunities for professionals who are well-trained in Machine learning and Analytics are skyrocketing too. This has encouraged many universities across the country to introduce Machine learning and Data Analytics as a subject in UG & PG curriculum especially in management and engineering disciplines. But these emerging technologies and the industries that they are used in are evolving at a scintillating pace. Therefore, there is a widening gap between the demand and supply of these new-age tech skills. Amal Jyothi College proposes to bridge the gap with this AICTE sponsored Short-Term Training Programme.

About the STTP

The vision of this STTP is to enhance the quality of education imparted in institutions by providing faculty members with a platform to learn all they need to know about Data Analytics and Machine learning. Educators will get to learn the best practices in these domains so that they can teach the future workforce the required skill sets.

Objective of the STTP

- Introduction to Data Analytics, Machine Learning and its Real-life applications.
- To develop skills for using recent machine learning software and algorithms to solve practical problems.
- To learn and apply machine learning methodology using tools like Excel, Tableau, and Python for exploring and analysing real-time data.
- To learn tools and algorithms for creating machine learning models that learn from data, and to scale those models up to big data problems.
- To gain experience of doing independent study and research.

Benefits and Outcomes of the Programme

i. Learn the importance of data.
ii. Learn the various aspects of data handling and how information can be extracted from data.
iii. Carry out predictions how to predict how to analyse predicted values, discuss the importance of variables in a dataset.
iv. Industries and domains where analytics are used extensively.
v. Analyse big data problems using scalable machine learning algorithms.
vi. Guide/mentor the students to seek job opportunities in Data Analyst/Machine learning fields.

Programme Features

a. The programme is split into lectures and hands-on sessions.
b. Hands-on experience on basic & advanced level topics.
c. Interaction & learning with experts from academia & industry.
d. The resource persons are from leading institutions like IIT, NIT, Universities and industry experts.

Eligibility

Faculty members and researchers of AICTE approved Colleges/Institutes and delegates from Industries are eligible to attend this programme.

SCHEDULE

AUG 3 — Day 1

Session 1 — **Introduction to Data analytics and its applications**
Dr. Gee Varghese Titus, *Associate Professor*
Amal Jyothi College of Engineering, Kanjirapally

Session 2 — **Data Analytics & Visualisation using Excel**
Mr. Noel George, *Biostatistician*
PValue Solution, Bangalore

AUG 4 — Day 2

Session 1 — **Data Analytics and Visualization using Tableau**
Dr. Sunil Job *(RHCSA, RHCE, RHCSS)*
Chief Consultant, Academic Solutions – IPSR

Session 2 — **Introduction to Python for Data Science**
Dr. Terry Jacob Mathew, *Associate Professor*
Mar Athanasios College for Advanced Studies, Tiruvalla

SCHEDULE Contd...

AUG 5 — Day 3

Session 1 — **Data Clustering**
Dr. Abdul Nazeer K A, *Professor*
Department of Computer Science & Engineering, NIT Calicut

Session 2 — **Integration of fuzzy logic in data mining**
Dr. Binu Thomas, *Associate Professor*
Marian College, Kuttikanam

AUG 6 — Day 4

Session 1 — **Introduction to Machine learning and its applications**
Prof. Gloriya Mathew, *Assistant Professor*
Amal Jyothi College of Engineering, Kanjirapally

Session 2 — **Machine learning Research concerns and challenges**
Dr. Ebin Deni Raj, *Head*
Dept. of Computer Science & Engineering
Indian Institute of Information Technology, Kottayam

AUG 7 — Day 5

Session 1 — **Data pre-processing technique**
Dr. Deepthi P S, *Assistant Professor*
Dept. of Computer Science & Engineering
LBS Institute of Technology for Women, Thiruvananthapuram

Session 2 — **Convolutional Neural Networks-An efficient architecture for image classification**
Dr. Sabu M K, *Associate Professor and Head*
Department of Computer Applications
Cochin University of Science & Technology, Kochi

AUG 8 — Day 6

Session 1 — **Machine Learning for Big Data Analytics**
Dr. M. V. Judy, *Associate Professor, Dept. of Computer Applications*
Cochin University of Science & Technology, Kochi

Session 2 — **MLP and SVM in Machine learning**
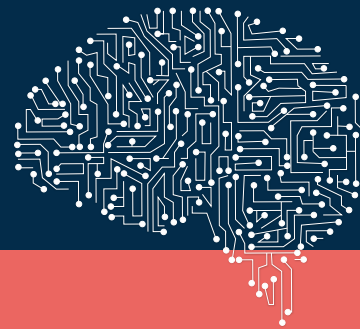Dr Juby George, *Assistant Professor*
Marian College Kuttikanam

Registration

··· Interested candidates must fill up the Google form available at following link: https://bit.ly/3fjraOs on or before 28 July 2020.

··· The number of participants are limited. Registrations will be confirmed based on scrutiny by the Programme Evaluation Committee.

··· The selected participant will be intimated by email on 29 July 2020.

··· After receiving the registration confirmation mail, the participant should fill in the registration form given in the confirmation mail and email it to sttp@amaljyothi.ac.in on or before 1 August 2020.

··· There is no registration fee.

Certificates

Certificate will be issued to those participants who attend all the sessions and qualify in the test conducted at the end of the programme.

COMMITTEE

ORGANIZING COMMITTEE

H.E. Mar Jose Pulickal, *Bishop, Diocese of Kanjirapally*
Rev. Fr. Dr. Mathew Paikatt, *Manager*
Rev. Fr. Jacob Kodimarathumoottil, *Bursar*
Dr. Z V Lakaparampil, *Principal*
Dr. Jacob Philip, *Dean - Academic*
Dr. Soney C George, *Dean - Research*
Prof. Tomy Joseph, *Dean - Admin*
Rev. Fr. Rubin Thottupuram, *HOD - CA*
Prof. Manoj T Joy, *HOD - CSE*

PROGRAMME EVALUATION COMMITTEE

Dr. Z V Lakaparampil, *Principal*
Dr. Juby Mathew, *Coordi. and Member Secretary*
Prof. Manoj T Joy, *HoD - CSE, Member*
Rev. Fr. Rubin Thottupuram, *HoD - CA, Member*
Dr. Jeba Sonia J, *Assoc. Prof., CSE, Subject Expert*

COURSE COORDINATOR

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PROGRAMME COORDINATOR

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CONTACT

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