

DATE: 01<sup>st</sup> Mar 2018

From,

Deeksha M  
Assistant Professor  
Dept. of CSE  
A.I.E.T, Mijar

Through,

The H.O.D.  
Dept. of CSE  
A.I.E.T, Mijar

To,

The Principal  
A.I.E.T, Mijar

Respected Sir,

**SUBJECT: - Requisition to attend a workshop**

As per the above subject, I seek your permission to attend a workshop on "Introduction to software defined network" in NITK, Surathkal from 26<sup>th</sup> to 30<sup>th</sup> Mar 2018. Kindly do the needful.

Thanking you,

Yours Sincerely,



(Deeksha M)

*Deeksha M*  
*1/3/18*  
H. O. D.  
Dept. Of Computer Science & Engineering  
Alva's Institute of Engg. & Technology  
Mijar, MOODBIDRI - 574 225

*1/3/18*  
PRINCIPAL  
Alva's Institute of Engg. & Technology,  
Mijar, MOODBIDRI - 574 225, D.K

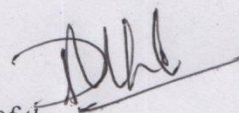
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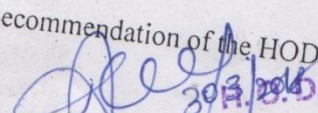


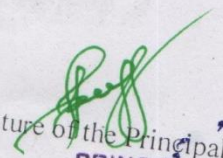
Application for Permission to Attend  
Conferences/Seminars/Workshops/FDP and Paper Presentation

1. Name of the staff : Duksha M
2. Designation and department : Assistant Professor
3. Name of the conference/seminar/FDP : Introduction to s/w
4. Type of conference(national/state level) : defined n/w
5. Place of conference : NITK, Surathkal
6. Date of conference : 26/03/2018 - 30/03/2018
7. Title of the paper submitted : -
8. Mention the items enclosed :
  - a. copy of the brochure : (Yes / No)
  - b. copy of invitation letter : (Yes / No)
  - c. acceptance letter : (Yes / No)
9. Rough estimate of expenditure (total) :
  - a. Registration fees : 5000/-
  - b. Bus/train/air fare : -
10. Details of previous workshop attended : -

Date: 3/03/2018

  
Signature of the applicant

Recommendation of the HOD  
  
30.3.2018  
Dept. Of Computer Science & Engineering  
Alva's Institute of Engg. & Technology  
Mijar, MOOBBIDRI - 574 225

  
Signature of the Principal  
PRINCIPAL  
Alva's Institute of Engg. & Technology,  
Mijar. MOOBBIDRI - 574 225, D.K





National Institute of Technology Karnataka  
Surathkal



Ministry of Human Resource Development  
Government of India

सत्यमेव जयते



GLOBAL INITIATIVE OF ACADEMIC NETWORKS

## GLOBAL INITIATIVE OF ACADEMIC NETWORKS

### Certificate of Participation

This is to certify that **Ms. Deeksha M.** from **Alva's Institute of Engineering and Technology, Moodbidri** participated in the MHRD Supported **GIAN Advance Level Course on Introduction to Software Defined Networking** from **26<sup>th</sup> to 30<sup>th</sup> March 2018** held at Department of Electronics and Communication (E&C) Engineering, National Institute of Technology Karnataka (NITK), Surathkal, Mangalore, Karnataka, India.

**Dr. K. Narayan Prabhu**  
Local GIAN Coordinator  
NITK Surathkal

**Course Coordinator**  
NITK Surathkal

**Prof. U. Shripathi Acharya**  
Head, Dept. of E&C Engg.  
NITK Surathkal





**Department of Electronics & Communication Engineering**  
NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA  
SURATHKAL, SRINIVASNAGAR - 575025  
KARNATAKA, INDIA

Date: 30-03-2018

**Fee Receipt**

Received with thanks a sum of Rs. 5000/- (Rupees Five Thousand only) from **Ms. Deeksha M.**, Alva's Institute of Engineering and Technology, Moodbidri as registration fee for the MHRD Supported GIAN Advance Level Course on Introduction to Software Defined Networking held during 26<sup>th</sup> to 30<sup>th</sup> March 2018 in the Department of Electronics & Communication Engineering, NITK Surathkal.

Dr. Pathipati Srihari  
Course Coordinator & Assistant Professor  
Dept. of E&C Engineering  
NITK Surathkal



# Report

## Introduction to Software Defined Networks

Managing networks is becoming increasingly complex. This has fostered research in the area of network management and led to the development of new approaches to efficiently manage networks. Software Defined Networking (SDN) is a promising approach, focusing on efficiently managing networks by using a logically centralized control plane. It is an emerging architecture, cost effective and highly suitable for managing networks, especially datacenters. Network Function Virtualization (NFV) is another new technology enabling network services to be provided as software running in Virtual Machines (VM) or containers instead of having purpose-built hardware appliances for each network resident function. Recently, there has been considerable focus on adopting SDN and NFV for efficiently managing the network and the services they provide. Both these technologies are crucial in managing complex networks and services (e.g., Data Center Networks and Cloud Services). The physical separation of the network control plane from the forwarding plane, and where a control plane controls several devices.

The course dealt with the fundamentals of Software Based Networks: SDN and NFV, Motivation for SDN and NFV, Advantages and challenges of SDN and NFV. Day 2: Concepts on Components of SDN were discussed and hands-on session was conducted. Day 3: Discuss SDN protocols (e.g., OpenFlow), programming models (e.g., P4), simulation and modeling tools (e.g., ns-3, Mininet) and open source platforms (e.g., OpenNetVM) for studying and analyzing the effectiveness of SDN and NFV. Day 4: Discussed the concepts on NFV concept virtualization, VNF, NFV infrastructure, CORD architecture was discussed followed by hands-on session. Day 5: Provide exposure to SDN and NFV implementation issues and their solutions through case studies and demonstrations.

Deeksha M.







# ALVA'S EDUCATION FOUNDATION (R.)

MOODBIDRI - 574 227, D.K.

No. :

**DEBIT / CREDIT VOUCHER**

Date 01/03/2018

Sl.No.	Particulars	College Code	Debit (₹)	Credit (₹)
a	Workshop - registration fee	AL	5000/-	
b				
c				
d				
e				
PAYABLE / RECEIVABLE			5000/-	
TOTAL			5000/-	

Rupees Five thousand only

Narration Ms. Divyasha M.

Assistant Professor, Dept of CSE, AET

KMO  
Prepared by

Principal

A.O.

Pr.D.  
Authorized by

Receiver's / Remitter's Signature

Alva's Institute of Engg. & Technology,  
Mijar, MOODBIDRI - 574 225, D.K.

Dept. Of Computer Science & Engineering  
Alva's Institute of Engineering & Technology  
Mijar, MOODBIDRI - 574 225, D.K.