

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

From,

Dr. Sumith N  
Sr. 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 2-day Hands-on training program on IoT in NITK, Surathkal from 24<sup>th</sup> and 25<sup>th</sup> Feb 2018. Kindly do the needful.

Thanking you,

Yours Sincerely,



(Dr. Sumith N)

*Forwarded  
Plz see f. HOD  
2/1/18*

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





1

## National Institute of Technology Karnataka, Surathkal

### 2-Day Hands-on Training Programme on IoT

23-24 February, 2018

E&C Seminar Hall

NITK Surathkal is executing a joint project on "Building capacity in teaching and collaborative research in sensor systems for public utilities" under Newton-Bhabha Programme funded by Royal Academy of Engineering, UK. As part of the project, a hands on training programme on IoT is organized as per the following schedule.

**Timings:** 9.00 am – 5.00 pm on 23-24 February, 2018

**Venue:** E&C Seminar Hall, 2<sup>nd</sup> floor, Dept. of E&C Engineering

This is the second training programme being conducted under the project and the topics would be same as the first programme held during 18-19 Aug., 2017.

**Topics :** Introduction to IoT, Opportunities in IoT, A few examples of IoT systems, Sensors and Actuators for IoT systems, Interfacing circuits, IoT Hardware, Introduction to IoT hardware and software tools, Industry 4.0, Case study of Industry 4.0, IoT Protocols.

**Hands-on sessions:** Programming IoT hardware using Arduino IDE, Integrating IoT hardware with Cloud platforms, Basic mobile app development and integrating with IoT hardware, Introduction to programming on Raspberry Pi, Demo of a working IoT system and Advanced IoT tools.

**Resource persons:** Team from FluxGen Engineering Technologies Pvt. Ltd., Bangalore

The training programme is free of cost to students and faculty members of Engineering colleges. Interested students (UG/PG/PhD) and faculty members from EC, EE, CS and IT departments may kindly register using the following link.

**Register at:** <https://goo.gl/forms/ykFcoWSwDg4kg27p1>

**Registration is limited to 50 on a first come first serve basis. The participants have to come with their Laptops for the training.**

**Pl. Note:** Those who have attended the first training programme during 18-19 Aug. 2017, need not attend.

For more information, please contact,

**Mr. Shreenivasa K.** (9663678925), [shreenivasakonaje@gmail.com](mailto:shreenivasakonaje@gmail.com)

**Coordinator:**

**Dr. M S Bhat,**

**Professor, Dept. of E&C Engineering, NITK Surathkal**

# Report on 2 day hands on training program on IoT

Venue: Dept of ECE, NITK Surathkal

DATE: 23th and 24<sup>th</sup> of Feb, 2018

**Day 1: 23-2-2018**

Session 1:

Introduction to IoT

- Real world examples of IoT application such as OLA, alexa, mobilephone, Mahindra Eva- electric vehicle
- IoT to detect leakage of LPG, healthcare monitoring of animals

Session 2:

- Introduction to nano atmel 320chip and its specification
- Various tools, board

Session 3: Hands on session

- how to write and compile codes
- various editors
- blink programs
- LDR programs

Session 4: Hands on session

- LED and push button program
- Relay and push button programs
- buzzer control program

Day2: 24-2-2018

Session 1:

- Firebase programs for cloud

Session 2

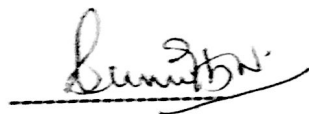
- Introduction to Arduino Json

Session 3: Hands on session

- Temperature measurement
- Brightness control using potentiometer
- relay control using serial communication and Bluetooth

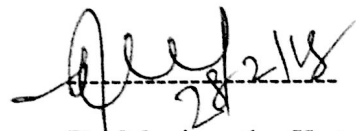
Session 4: Hands on session

- Google assistant programs to control home appliances
- Adafruit library example program



Dr. Sumith N

(Attendee)




Dr. Manjunath Kotari

HOD-CSE  
Dept. of Computer Engineering  
Aiva's Institute of Technology  
Mijar, MOODSIDI - 574 225

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

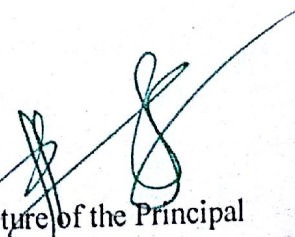
1. Name of the staff : *Sumith N.*
2. Designation and department : *Sr. Assistant Professor*
3. Name of the conference/seminar/FDP : *Hands-on training program on IoT*
4. Type of conference(national/state level) : *National*
5. Place of conference : *NITK, Surathkal*
6. Date of conference : *24th and 25th Feb 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 : *480 -*
  - b. Bus/train/air fare : *360 (180/- per day)*
  - c. *DA for 2 days*
10. Details of previous workshop attended :

Date: *01/02/2018*

  
Signature of the applicant

Recommendation of the HOD

*my 6 friends &  
workshop  
Deep  
1/2/2018*

  
Signature of the Principal



Department of Electronics & Communication Engineering  
National Institute of Technology Karnataka, Surathkal

## Certificate of Participation

This is to certify that *Dr. SUMITH N* from *Alva's Institute of Engineering & Technology, Moodbidri* participated in the  
2 Day Hands-on Training programme on IoT

during 23 - 24 February, 2018

Prof. M. S. Bhat  
Programme Coordinator  
NITK Surathkal

Prof. U. Shripathi Acharya  
HOD, E&C Engg.  
NITK Surathkal





# ALVA'S EDUCATION FOUNDATION (R.)

MOODBIDRI - 574 227, D.K.

No.:

DEBIT / CREDIT VOUCHER

Date .. 01/02/2018

Sl.No.	Particulars	College Code	Debit (₹)	Credit (₹)
a	Training program at NITK, Surathkal	AL		
b	registration		500/-	
c	TA		340/-	
d				
e				
PAYABLE / RECEIVABLE			840/-	
TOTAL			840/-	

Rupees Eight hundred and forty only

Narration Ms. Sumith N.

Sr. Assistant Professor, CEE, AIET

Prepared by

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

A.O.

Authorised by

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

Receiver's / Remitter's Signature