

NEW HORIZON COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRONICS AND COMMUNICATION
ENGINEERING

13/11/2019

GUEST LECTURE

This is to inform all V semester students of ECE that the guest lecture is arranged on 13/11/19 at Classroom No.219 between 10:00 Am-12:00 noon.

Topic to be delivered : "Microcontroller and its significance in Real World"

Name of the Speaker : Mr. Gobalakichenan Ganeshan

Designation : Program Manager

Company : IBM India Pvt Limited, Bangalore

Respective subject teachers are hereby informed to be present at Classroom No.219 during the lecture.

All the faculty members are invited to attend the same without affecting the regular classes.


Guest Lecture Coordinator


HOD-ECE

Trainer's Technical Profile – Mr. Gopal

Mr. Gopal is a technical enthusiast, entrepreneur and technical-trainer par excellence. He has over 19 years of experience as an IT professional, where he has worked in many client-facing engagements, across the world, spanning industries such as Leasing & Financing, Automotive and Healthcare. He is currently performing the role of a "Program Manager" at an MNC, here in Bangalore. During his career with the IT Industry, he has delivered more than a hundred different training programs, workshops, seminars, webinars, for fresh graduates and experienced professionals alike, and have received numerous recognitions as one of the best trainers in his organization.

Mr. Gopal got hooked to his technical interests from his early-childhood; while working at his father's Two-Wheeler workshop, getting his hands dirty by servicing motor-bikes and scooters during the 80s and 90s – Thanks to his father, he was able to gain in-depth knowledge in automotive technologies. He found the electrical components of automobiles more interesting. He then tuned his curiosity towards electrical engineering, which further took turns when he started with mini hobby electronics projects – that was sometime when he was in his middle-school, and since then the fascinating world of analog and digital electronics continues to be his passion until today. He is now skilled in handling, analyzing and servicing all kinds of gadgets, be it home-appliances, automobiles, or any other electrical/electronic equipment for that matter. He has designed and built many mini-projects, for example, "Intermittent Wiper Controller with Adjustable delay times, that is easy and simple to retrofit on classic cars".

52 With his wide multi-disciplinary knowledge and skills, he enjoys working with engineering students from various streams such as IT, CSE, ECE, EEE, E&I, and Mechanical, guiding them for their Final-Year projects. His current works and areas of interests are in the field of Microprocessors/Microcontrollers, Embedded systems, Mechatronics, Home and Industrial automation, Internet of Things (IoT), and Machine & Sensor data analytics.

Mr. Gopal has his B.Tech in Electronics & Communication engineering from Pondicherry Engineering College, Pondicherry University which he pursued after his Diploma in Electronics & Communication engineering from Motilal Nehru Govt. Polytechnic, Pondicherry. He has also completed his "Diploma in Management" from Indira Gandhi National Open University.

Mr. Gopal strongly believes that we are living in a unique point-in-time, where there is a lot of opportunity and abundant of resources available for the "Do-it-yourself" person in all of us, and we should all be enabled to make the best use of this. He is here this week-end to motivate and encourage us to take engineering excellence as an approach to solve real-life problems to help man-kind at large.

His topic for today's lecture would be, "**Microcontrollers**", with some highlights on the recent-trends in these areas.

Let us welcome him on stage with a big round of applause.

Welcome Sir, the dais is all yours!!

~~XXXXXXXXXX~~

S.No	USN No	NAME	Section	Signature
1	INH17EC131	ASHWIN SP	5A	
2	INH17EC051	MILAN S RAO	5A	
3	INH17EC725	NAINI REDDY	5C	
4	INH17EC096	SOLVIK DAS	5B	
5	INH17EC404	Bhanupriya.X	5B	
6	INH17EC117	Vidhya.B	5B	
7	INH17EC126	Vaishali.MS	5B	
8	INH17EC712	Grace Gladys.A	5C	
9	INH17EC758	Y. SUCHARITHA	5C	
10	INH18EC419	Tejaswini. Tr	5C	
11	INH17EC702	AKshaya OK	5C	
12	INH17EC721	Manisha MN	5C	
13	INH17EC727	Neha K	5C	
14	INH17EC711	Gayashree PS	5C	
15	INH17EC717	Aiswarya K	5C	
16	INH18EC006	Anand Chaitanya.V	5C	
17	INH18EC400	Akash Surt	A Madam	
18	INH18EC420	Vignesh . R	5B	
19	INH18EC424	Naveen.N	5A	
20	INH18EC414	Santosh B Kond	5A	
21	INH18EC421	Vinod.K	5A	
22	INH18EC735	Kushal	5A	
22	INH17EC086	Samyuktha.V	5B	
23	INH17EC120	Nishwajothi.B.Reshmi	5B	
24	INH17EC079	RENUKA . S.N	5B	
25	INH17EC087	Jateesh. Hegde	5B	
26	INH18EC432	Vishal Nayak	5A	
27	INH17EC122	Abhay Kumar	5B	
28	INH18EC429	Sheshadhan Hegde	5B	
29	INH17EC095	Shubha . S	5B	
30	INH17EC097	Sounmiya . A.	5B	

**NEW HORIZON COLLEGE OF ENGINEERING
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
FEEDBACK FORM**

NAME OF THE EVENT/CLUB: *Micro Controller*

FEEDBACK ON (Mention the topic): *It's light in the real world* **DATE:**

Instruction: Please put a tick mark at the appropriate column.

Rating	Clarity	Visuals	Skills	Guidance	Overall
Excellent		✓	✓	✓	
Good	✓				✓
Average					
Satisfactory					

Comments/Remarks/Suggestions:

- 1.
- 2.
- 3.

Name & USN No.(optional)

Signature (optional) *[Signature]*

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**NEW HORIZON COLLEGE OF ENGINEERING
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
FEEDBACK FORM**

NAME OF THE EVENT/CLUB: *Guest lecture*

FEEDBACK ON (Mention the topic): *Microcontroller*

DATE: *13/11/2019*

Instruction: Please put a tick mark at the appropriate column.

Rating	Clarity	Visuals	Skills	Guidance	Overall
Excellent					
Good	✓	✓		✓	✓
Average			✓		
Satisfactory					

Comments/Remarks/Suggestions:

1.

2.

3.

Name & USN No. (optional) → *INH18EC403*

[Signature]
Signature (optional)

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**NEW HORIZON COLLEGE OF ENGINEERING
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
FEEDBACK FORM**

NAME OF THE EVENT/CLUB: Guest Lecture on Microcontroller

FEEDBACK ON (Mention the topic): Guest Lecture

DATE: 13th Nov. 2019

Instruction: Please put a tick mark at the appropriate column.

Rating	Clarity	Visuals	Skills	Guidance	Overall
Excellent				✓	
Good	✓	✓	✓		✓
Average					
Satisfactory					

Comments/Remarks/Suggestions:

1. The Microcontroller Guest Lecture is a good platform where we can learn about the recent change in technologies
2. and know more about job opportunities and new innovations
3. in today's world.

Name & USN No.(optional)

Signature (optional)

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**NEW HORIZON COLLEGE OF ENGINEERING
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
FEEDBACK FORM**

NAME OF THE EVENT/CLUB:

FEEDBACK ON (Mention the topic):

DATE: 13-11-19

Instruction: Please put a tick mark at the appropriate column.

Rating	Clarity	Visuals	Skills	Guidance	Overall
Excellent	✓	✓	✓	✓	✓
Good					
Average					
Satisfactory					

Comments/Remarks/Suggestions:

- 1.
- 2.
- 3.

Name & USN No. (optional)

Aravind
Signature (optional)

**NEW HORIZON COLLEGE OF ENGINEERING
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
FEEDBACK FORM**

NAME OF THE EVENT/CLUB: *Microcontroller seminar*

FEEDBACK ON (Mention the topic): *Microcontroller*

DATE: *13/11/2019*

Instruction: Please put a tick mark at the appropriate column.

Rating	Clarity	Visuals	Skills	Guidance	Overall
Excellent		✓		✓	✓
Good	✓		✓		
Average					
Satisfactory					

Comments/Remarks/Suggestions:

1. *Good Explanation*
2. *nice presentation*
- 3.

Name & USN No.(optional) *AKILESH K
19M18ECC04*

Akilesh
Signature (optional)

**NEW HORIZON COLLEGE OF ENGINEERING
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
FEEDBACK FORM**

NAME OF THE EVENT/CLUB:

FEEDBACK ON (Mention the topic): *Microcontroller*
Instruction: Please put a tick mark at the appropriate column.

DATE: *13/11/19*

Rating	Clarity	Visuals	Skills	Guidance	Overall
Excellent				✓	
Good	✓		✓		
Average		✓			✓
Satisfactory					

Comments/Remarks/Suggestions:

- 1.
- 2.
- 3.

Name & USN No.(optional)

Signature (optional)

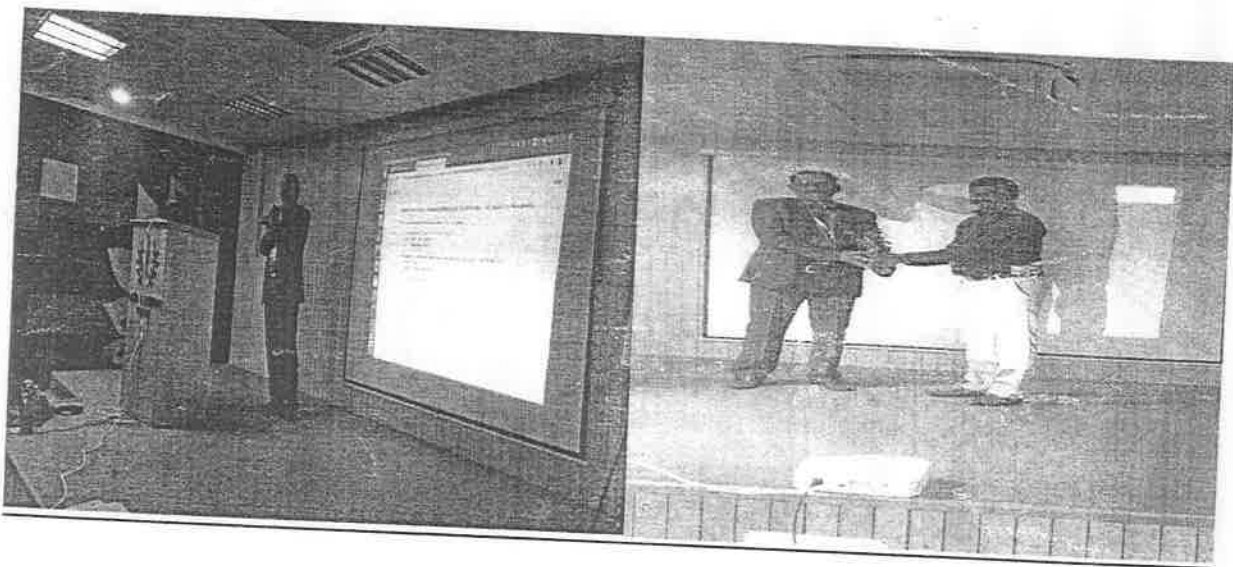
Guest Lecture on the subject "Embedded System Design"
on 15/02/2020(Saturday)

Topic : ARM programming on Android Devices

Speaker: Mr.Praveen Kumar,

Founder & CEO, Ekagga Technology & Services Pvt. Ltd..

Mr. Praveen Kumar is an accomplished technical leader with 14 years of experience in the IoT/Mobile/Telecom/eCommerce industry - with over 7 years of leadership experience in R&D and software development management. Proven track record with end to end life cycle experience in leading and execution of parallel, complex projects, delivering high quality deliverables on time, especially leading & building teams which involved learning new technologies and co-operation with other teams. He has lead the development of Micromax Custom ROM from scratch with setting up complete new team. Also lead the design and development of Nokia X Software platform SDK, the first Android compatible platform from Nokia. Currently formed a new team at Ekagga Technology upto 25+ team members. Working on IoT / Mobile OS / Application Development. Trying to improve the life of individual by IoT implementation. Delivered Automotive IoT product from scratch using NVIDIA tx1 board for analysing the driver behaviour on Edge.



Contents Delivered on the Topic ARM Programming: Processor Arch , Development Environment for Android , Android Tools adb , Android NDK for Native Development Writing Android Hello World App , Writing Native Hello World App , Assembly program for ARM : Assembling Linking Executing

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Assembly Programming on Android Device What is Assembly? Assembly is low level language to provide basic instruction to processor . It give direct access to system resources . High level languages are translated into assembly for execution . It allows setting up register, accessing memory location, hardware interface. ARM processor is one of most widespread CPU core in this world . We have more no of ARM devices in our home than x86 like Phone, router, IoT Devices etc. As it is wide spreaded there are changes of security breach. Assembly help you make robust solution. ARM is RISC(Reduced Instruction Set Computing) processor and very less no of instruction around 100

