Bansilal Ramnath Agarwal Charitable Trust's

Vishwakarma Institute of Technology,

(An Autonomous Institute Affiliated to Savitribai Phule Pune University)

666, Upper Indira Nagar, Bibwewadi, Pune -37

Four Days Short Term Training Program

On

"Signal Processing using MATLAB"

September 2016

CERTIFICATE

This is to certify that Dr./Mr./Ms./Mrs. __SAURABH VIJAY THAKUR__
has attended short term training program on **"Signal Processing using MATLAB"** on
12, 13, 19 & 20th September 2016 at Department of Electronics Engineering,
Vishwakarma Institute of Technology, Pune.

Prof Kishori Degaonkar
Coordinator

Prof. Dr. Shripad Bhatlawande
Convener

Prof. Dr. Rajesh Jalnekar
Director

Sinhgad Technical Education Society's

SINHGAD ACADEMY OF ENGINEERING

(Affiliated to University of Pune and Approved by, AICTE, New Delhi.)
S. No. 40/4 A. Near octroi Post, Kondhwa –Saswad Road, Pune – 411048.
☎ : (020) 26934441, 26934550, Fax : 020- 26934297,
E-mail : saeprincipal@sinhgad .edu, Website : www.sinhgad.edu

Sinhgad Institutes

Department of Electronics and Telecommunication

Four Day Short Term Training Program(STTP)
On
"Signal Processing using MATLAB"
at
Vishwakarma Institute of Technology, Bibwewadi, Pune

This STTP is conducted by Department of Electronics and Telecommunications of Vishwakarma Institute of Technology, Bibwewadi, Pune, from date 12, 13, 19 &20 September 2016.

On the first day of STTP Dr. Sandip Pathak brief about basic curve fitting and regression analysis and filter bank theory. He also took Hands on curve fitting on MATLAB tool.

On the second day Dr. Sandip pathak sir talked about Filter design i.e. IIR and FIR in details on MATLAB.

On third day Dr. Sushma D. Shelke, she described basic of image processing operations. She also provide hands on implementation of Wavelet tool box in MATLAB.

On fourth day of STTP Dr. Sushma D. Shelke brief about role of wavelets on image prot can be use can be used ford for pat pattern recognition. On the last day of STTP was concluded with valedictory function.

I have learnt basic of image basic of image processing that can be applied for pattern recognition.

Prof. S. V Thakur

Society for Computer Technology & Research's

Pune Institute of Computer Technology, Pune

Department of Electronics & Communication Engineering

Savitribai Phule Pune University

NATIONAL INSTRUMENTS

IET The Institution of Engineering and Technology

A National Level Workshop
on

Software Defined Radio with LabVIEW and NI-USRP"

Certificate of Participation

Mr. / Ms. ___MUDASSAR · H · NAIKWADI_____ has

participated in five day National Level Workshop on 'Software Defined Radio with LabVIEW and NI-USRP', organized by PICT - NI LabVIEW Academy, Department of Electronics & Telecommunication Engineering and sponsored by BCUD, Savitribai Phule Pune University in Association with National Instruments & IET during 20th- 24th February 2017.

Dr. Y Ravinder
Coordinator & HoD (E&TC Dept.)

Dr. P. T. Kulkarni
Convener & Principal

A Report On

Software Defined Radio with LabVIEW and NI-USRP

A National Level Workshop on Software Defined Radio with LabVIEW and NI-USRP
was organized by Pune Institute of Computer Technology,Pune during 20-24th Feb 2017

Objective:

The objective of this workshop was to orient all the faculty towards Software Defined Radio
with LabVIEW and NI-USRP and make familiar with hands on tools.

Day One :

Prof Merchant fromIIT Mumbai, welcomed all the participant for the workshop. The
workshop was inaugurated under his aegis.

There was an expert talk by Prof Merchant who gave an introduction to emerging trends
in Communication Engineering.

He highlighted the phenomenal growth in Telecom Industry and introduced the audience
to Next generation Wireless Systems and Technologies.

Day Two :

Dr R Y Ravinder from Pune Institute of Computer Technology,Pune, welcomed all the
participant for second day of the workshop.

Bharati Vidyapeeth
Deemed University, Pune (India)
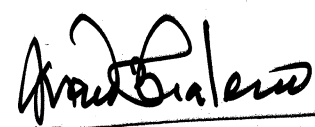**College of Engineering, Pune**

bvucep

CERTIFICATE

Faculty Development Programme
Signal Processing and Advanced Communications
Sponsored under TEQIP-II

This is to Certify that Prof./Mr/Mrs./Miss ___Atul B. Ingole___ of ___Sinhgad Academy of Engg.___ has Participated in Five Days Faculty Development Program on "Signal Processing and Advanced Communications" organized by Department of E&TC, Bharati Vidyapeeth University College of Engineering, Pune-43 from 27th February to 3rd March 2017.

Dr. Shruti Oza
Head, E&TC

Prof. Anand Bhalerao
Principal

Sinhgad Technical Education Society's

SINHGAD ACADEMY OF ENGINEERING ⓉⓂ

(Affiliated to University of Pune and Approved by, AICTE, New Delhi.)
S. No. 40/4 A. Near octroi Post, Kondhwa –Saswad Road, Pune – 411048.
☎ : (020) 26934441, 26934550, Fax : 020- 26934297,
E-mail : saeprincipal@sinhgad .edu, Website : www.sinhgad.edu

Department of Electronics and Telecommunication

A One Week TEQIP-II Sponsored FDP (27 Feb 2017-03 Mar 2017)

ON
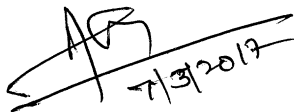### Signal Processing and Advanced Communication

This workshop was related to research trends in Electronics and telecommunication and other allied fields. Important research topics were included in this workshop. It was hosted by Bharati Vidyapeeth College of Engineering, Pune under TEQIP-II.

Following are the details of workshop

Ameya Mundhe from National Instruments has started with basics of Labview. He has taken basic and general systems for understanding the methodologies of Labview.
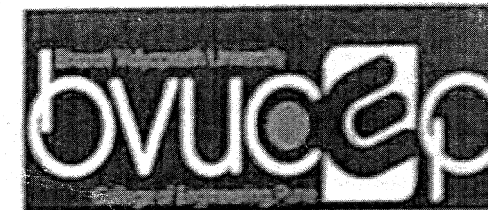
Next day he has started with signal processing modules. He has focused on basic signal processing tools which are utilized under the Labview. The handson session is helpful for understanding the basic methodologies. Also he has started with Image processing and video processing. By means of MyRio he has demonstrated how one can process still images and real time images captured by using MyRio.

Then last two days are utilized for the advanced communication where he has started from basics of communication and has ended with research topics like Software Defined Radio. He has successfully demonstrated how the unutilized spectrums can be sensed by means of USRT.

Prof. A.B.Ingole

Bharati Vidyapeeth
Deemed University, Pune (India)
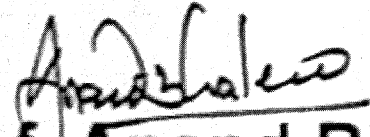### College of Engineering, Pune

bvucoe

CERTIFICATE

Faculty Development Programme
Signal Processing and Advanced Communications
Sponsored under TEQIP-II

This is to Certify that Prof./Mr/Mrs./Miss _Rajesh U. Yawle_ o
Sinhgad Academy of Engg. has Participated in Five Days Facult
Development Program on 'Signal Processing and Advanced Communications
organized by Department of E&TC, Bharati Vidyapeeth University College o
Engineering, Pune-43 from 27th February to 3rd March 2017.

Dr. Shruti Oza
Head, E&TC

Prof. Anand Bhalerao
Principal

Sinhgad Technical Education Society's

SINHGAD ACADEMY OF ENGINEERING ⓉⓂ

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Department of Electronics and Telecommunication

A One Week TEQIP-II Sponsored FDP (27 Feb 2017-03 Mar 2017)

ON
Signal Processing and Advanced Communication

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Prof. R.U.Yawle

Bharati Vidyapeeth
Deemed University, Pune (India)
College of Engineering, Pune
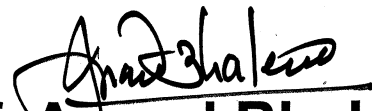
bvucep
College of Engineering Pune

CERTIFICATE

Faculty Development Programme
Signal Processing and Advanced Communications
Sponsored under TEQIP-II

This is to Certify that Prof./Mr/Mrs./Miss ___Vishal D. Bharate___ of ___Sinhgand Academy of Engg.___ has Participated in Five Days Faculty Development Program on "Signal Processing and Advanced Communications" organized by Department of E&TC, Bharati Vidyapeeth University College of Engineering, Pune-43 from 27th February to 3rd March 2017.

Dr. Shruti Oza
Head, E&TC

Prof. Anand Bhalerao
Principal

Department of Electronics and Telecommunication

A One Week TEQIP-II Sponsored FDP (27 Feb 2017-03 Mar 2017)

ON
Signal Processing and Advanced Communication

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Dr.M.M.Sardeshmukh

Bharati Vidyapeeth
Deemed University, Pune (India)
College of Engineering, Pune

celebrating
BHARATI VIDYAPEETH

Certificate

Faculty Development Program on
Embedded System Design and IoT
Sponsored by TEQIP-II

This is to Certify that Prof./Mr./Mrs./Miss _Minakshee M. Patil_

of _Sinhgad Academy of Engineering, Pune_ has participated

in Five days FDP on "Embedded System Design and IoT" organized by Department of Electronics,

Bharati Vidyapeeth Deemed University College of Engineering, Pune - 43 from 20th to 24th March 2017

and secured ___A___ grade.

Dr. Mrs. A. A. Shinde
Convener

Prof. Anand Bhalerao
Chairman

Sinhgad Technical Education Society's

SINHGAD ACADEMY OF ENGINEERING (TM)

(Affiliated to University of Pune and Approved by, AICTE, New Delhi.)

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E-mail : saeprincipal@sinhgad .edu, Website : www.sinhgad.edu

Department of Electronics and Telecommunication

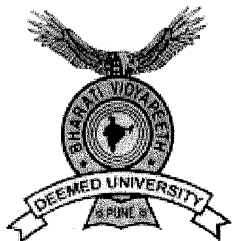## Five Days Workshop (20/3/2017 to 24/3/2017)

ON

"Embedded System Design & IOT"

This workshop is organized by TQIP in collaboration with E& TC department of BVU's College of Engineering, Pune.
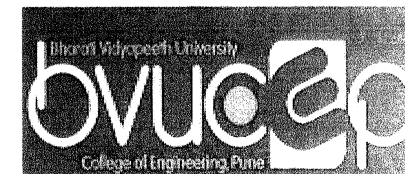
Internet of Things (IoT) is an ecosystem of connected physical objects that are accessible through the internet. The embedded technology in the objects helps them to interact with internal states or the external environment, which in turn affects the decisions taken. Internet of Things can connect devices embedded in various systems to the internet. When devices/objects can represent themselves digitally, they can be controlled from anywhere. The connectivity then helps us capture more data from more places, ensuring more ways of increasing efficiency and improving safety and IoT security. IoT is a transformational force that can help companies improve performance through IoT analytics and **IoT Security** to deliver better results. Businesses in the utilities, oil & gas, insurance, manufacturing, transportation, infrastructure and retail sectors can reap the benefits of IoT by making more informed decisions, aided by the torrent of interactional and transactional data at their disposal.

In this workshop we practiced many hands on sessions like data acquisition system using serial PC interface, Gesture controlled USB Mouse using Accelerometer , Building wireless sensor node, Real time sensor data logging in IOT cloud.

Prof Minakshee M Patil

Bharati Vidyapeeth
Deemed University, Pune (India)
College of Engineering, Pune

bvucep
College of Engineering Pune

CERTIFICATE

Faculty Development Programme
Antenna and Microwave Design
Sponsored under TEQIP-II

This is to Certify that ~~Prof./Mr/Mrs./Miss~~ Dr. J. P. Shinde of
SA OE Kondhwa Pune has Participated in Five Days Faculty
Development Program on "Antenna and Microwave Design" organized by
Department of E&TC, Bharati Vidyapeeth University College of Engineering,
Pune-43 from 20th March to 24th March 2017.

Dr. Shruti Oza
Head, E&TC
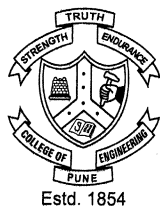
Prof. Anand Bhalerao
Principal

6)   **"Antenna and Microwave Design"**, One week Faculty Development Programme, organized by Department of E&Tc, Bharati Vidyapeeth University College of Engineering, Pune-43.

Date: 20th March to 24th March 2017

Summary:

The faculty development programme was designed for faculty members to acquire the knowledge in antenna design. The purpose of this FDP is to bring together researchers and PG students from academia and Engineers and scientist from industry and R&D institutes to have discussions along with applications on the recent advances in both the design and applications of antenna. Following were the objectives of the FDP:

- HFSS Design flow,Pre- processing and post
- Boundary conditions and excitations, Design of Patch Antenna
- HFSS-IE and Hybrid FEM-IE Technology
- 2x2 Array Antenna Design, Rat Race Coupler and Wilkinson Power Divider
- Antenna impedance matching co-simulation of Antenna and subsystem using HFSS and circuit design.

COLLEGE OF ENGINEERING PUNE

(An Autonomous Institute of Govt. of Maharashtra)

All India Council for Technical Education (under QIP cell)
Sponsored
One Week Short Term Training Program
on
Recent Trends in Cyber Security (RTCS)

Estd. 1854

Certificate

This is to certify that,

Jain Ruchi Atul of *SAE, Pune*

has attended and actively participated in AICTE (under QIP Cell) sponsored

one week short term training programme on **"Recent Trends in Cyber Security"**

organized by Department of Computer Engineering and Information Technology

College of Engineering Pune, held during February 13-17, 2017.

Dr. S. B. Mane
Coordinator
Computer & IT Dept.

Dr. V. K. Pachghare
Coordinator
Computer & IT Dept.

Dr. V. S. Inamdar
Head
Computer & IT Dept.

Prof. B. B. Ahuja
Director
College of Engineering Pune

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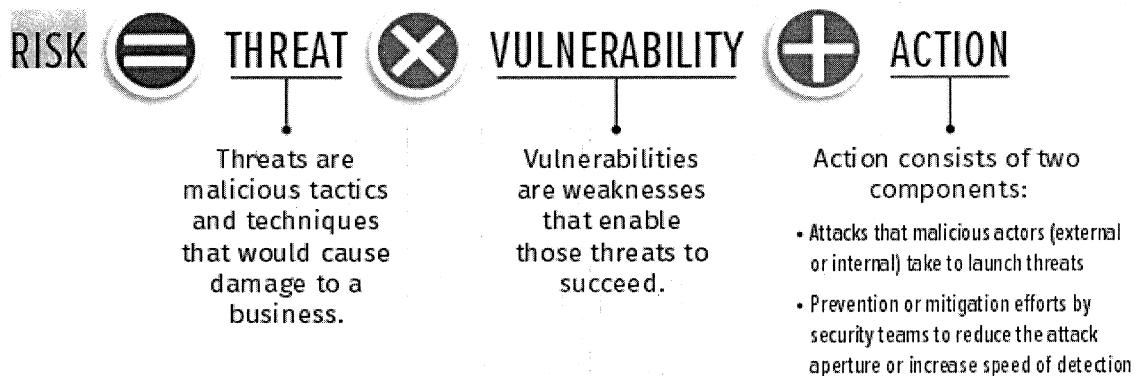☎ : (020) 26934441, 26934550, Fax : 020- 26934297,
E-mail : saeprincipal@sinhgad .edu, Website : www.sinhgad.edu

Sinhgad Institutes

Department of Electronics and Telecommunication

Summary
of
Recent Trends in Cyber Security

The above said workshop was organized at College of Engineering Pune from 13th to 17th Feb 2017 which was sponsored by AICTE under QIP cell.

In security, change always equates to risk. Because change is constant, being aware of the key changes that will increase risk is a critical part of being proactive in cyber security. A simple equation for risk is the following.

RISK ⊖ THREAT ⊗ VULNERABILITY ⊕ ACTION

Threats are malicious tactics and techniques that would cause damage to a business.	Vulnerabilities are weaknesses that enable those threats to succeed.	Action consists of two components: • Attacks that malicious actors (external or internal) take to launch threats • Prevention or mitigation efforts by security teams to reduce the attack aperture or increase speed of detection

In reality, security teams control only half of the "Action" parameter. We can't determine When threats will be developed or launched, and vulnerabilities are driven by weaknesses in people and technology. People change slowly, but technology changes rapidly, and business adoption of new technologies invariably brings new vulnerabilities that enable new threats. Understanding and anticipating business demand for emerging technologies is a key element in successful security programs. With each new wave of technology, threats tend to come in three forms: denial-of-service (DoS) attacks, cyber crime and attacks by nation-states.

DoS Attacks When weaknesses in new technologies are exposed (generally by experimenters, academics and hacktivists), DoS attacks are the easiest to launch. They crash systems or cause data storms that bring networks to a halt. Cyber Crime Cyber criminals and the ecosystem that supports them refine attacks to focus on approaches that can lead to revenue, most commonly by stealing information that can be resold or support account fraud.

Attacks by Nation-States Most, but not all, attacks launched by nation-states take advantage of the vulnerabilities exposed and techniques developed in the two earlier stages to develop highly refined and targeted attacks against specific targets of national value.

In all three cases, the underlying vulnerabilities that are exploited generally are not different. While reducing vulnerabilities is key to avoiding or minimizing damage from all forms of attack, what changes most significantly over time is the delivery mechanism for threats.

Changes in threats are only one factor that will impact cyber security programs. Changes in technology and business demand for using new technologies often cause much larger