JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
(Established by Govt. Act No. 30 of 2008)
Kukatpally, Hyderabad – 500 085, Telangana, India.

Dr. A. GOVARDHAN   Date: 08.05.2020
B.E.(CSE), M.Tech.(CS), Ph.D.(CSE), FIE, FCSI.
Professor of Computer Science and Engineering
RECTOR &
REGISTRAR I/c.

Lr. No. DAPO/ C-DAC online courses/2020

To

All the Principals/ Directors of the Constituent and Affiliated (Autonomous and Non Autonomous) Colleges /University Units of JNTUH

Sir/ Madam,

Sub: JNTUH, Hyderabad – Directorate of Academic & Planning – C-DAC two online courses "**Software Security and Secure Coding Guidelines**" and "**IoT Bootcamp**" during May – Jun 2020 – Communication to the students– Reg.

Ref: 1 Email dated 07.05.2020, from the Centre for Development of Advanced Computing (C-DAC), Hyderabad d.

2. Orders of the Vice-Chancellor dated 07.05.2020.

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In the reference (1) cited, the Centre for Development of Advanced Computing (C-DAC), Hyderabad stated that they have planned to conduct two online courses in "**Software Security and Secure Coding Guidelines**" and "**IoT Bootcamp**" during May – Jun 2020. These courses would be conducted for 3rd/ 4th year Engineering / PG students with Electronics / Computer Science specializations by R&D engineers of C-DAC. Two online sessions are planned per week for four weeks duration. Students would be provided with assignments for further exploration along with problem statements for project work. At the end of course, students who clear online exam would be provided with participation certificate. Please refer to enclose brochures for more details about these online courses.

Therefore, requesting all the Principals/ Directors of the Constituent and Affiliated (Autonomous and Non Autonomous) Colleges /University Units of JNTUH to communicate the above information to the students concerned

Yours sincerely,
Sd/-
REGISTRAR I/c.

Copy to:
PA to V.C./ Rector/ Registrar, JNTUH.
The Director, UAAC for information.
The Director, SIT with a request to upload this letter in the University Website.

150

YEARS OF
CELEBRATING
THE MAHATMA

Online Course on
Software Security and Secure Coding Practices

Speakers

Sessions would be delivered by Cyber Security team of C-DAC. Team has wide experience in R&D, skill based training, security audit and awareness generation in Cyber Security domain. They have developed various end point security solutions such as USB Pratirodh, AppSamvid, M-Kavach and Browser JSGuard.

Who can attend ? :

B.E, B.Tech, ME, MS, MCA or any post graduate or any equivalent 3rd or final year students (Electronics and Computer Science)

Online Sessions Plan:
Timings:
11:00 a.m to 12:00 noon

Topic	Date
What is Software Security?	13th May 2020
Software Security Threats (Memory Layout, Buffer Overflow, Format String, SQL Injection)	14th May 2020
Defense Mechanisms	18th May 2020
Secure Coding in C and C++	21st May 2020
Secure Android Programming	25th May 2020
Web Security	28th May 2020
Malware Analysis	1st Jun 2020
Secure Software Development Life Cycle	4th Jun 2020

Students who successfully complete the course would be given participation certificate

For online registrations visit : *http://meghsikshak.in/CDACHYD-Talks*
For any queries please email to : *training-hyd@cdac.in*

IoT Bootcamp

Concept:

The sessions will cover in-depth concepts on IoT such as
- IoT Architecture
- IoT Case studies
- IoT Ecosystem
- IoT Communication Technologies which includes LPWAN protocols (LoRa, NB-IoT etc.)
- IoT Networking, Application Layer protocols and Cloud Platforms
- I-P-P model (Idea to Prototype to Product)

Supported by

MEGH SIKSHAK

Speaker

Dr. S.V.Srikanth
Joint Director

Duration of each session:
11:00 a.m to 12:00 noon

Who can attend ? :
B.E, B.Tech, ME, MS, MCA or any post graduate or any equivalent 3rd or final year students (Electronics and Computer Science)

Topic	Date
IoT Architecture	12th May 2020
IoT Case studies	15th May 2020
IoT Ecosystem	19th May 2020
I-P-P model (Idea to Prototype to Product): Part I- Ideation and Validation	22nd May 2020
I-P-P model (Idea to Prototype to Product): Part II- Selection of IoT Hardware	26th May 2020
I-P-P model (Idea to Prototype to Product): Part III- IoT Communication Technologies which includes LPWAN protocols (LoRa, NB-IoT etc.)	29th May 2020
I-P-P model (Idea to Prototype to Product): Part IV- IoT Cloud and Software Development	2nd Jun 2020
I-P-P model (Idea to Prototype to Product): Part V- Prototype to Product, Understand the challenges	5th Jun 2020

Students who successfully complete the course would be given participation certificate

For online registrations visit : *http://meghsikshak.in/CDACHYD-Talks*
For any queries please email to : *training-hyd@cdac.in*

Online Course on
Software Security
and Secure Coding Practices

Background and Need:

In today's scenario, Cyber Security threats are majorly addressed reactively, but by following proper Software Security practices we can minimize the attack surface and address this problem proactively. Therefore Software Security knowledge is the requirement of every Software Engineer. Software Security aspects including Secure Software Development Life Cycle are focussed as a part of this series along with exposure to secure programming for C & C++ languages. Security from the perspective of Android and Web application is also covered to provide a wider exposure.

Learning Outcomes:

- Define Software Security and understand the importance of Secure Software Development
- Exposure to security threats and the defense mechanism to protect against such threats
- Learn how to do secure programming using C & C++ and on Android
- Get exposed to web security
- Understand how malware analysis is carried out
- Learn about how to apply security during Software Development Life Cycle
- Problem statements and required lab tools would be shared with participants so that they can execute a project after the online sessions

Who can attend ? :

B.E, B.Tech, ME, MS, MCA or any post graduate or any equivalent 3rd or final year students (Electronics and Computer Science)

Online Sessions Plan:
Timings:
11:00 a.m to 12:00 noon

Prerequisites:

- Programming in C/C++
- Software Development Life Cycle
- OS Concepts
- Web Programming Concepts
- Security Concepts

Topic	Date
What is Software Security?	13th May 2020
Software Security Threats (Memory Layout, Buffer Overflow, Format String, SQL Injection)	14th May 2020
Defense Mechanisms	18th May 2020
Secure Coding in C and C++	21st May 2020
Secure Android Programming	25th May 2020
Web Security	28th May 2020
Malware Analysis	1st Jun 2020
Secure Software Development Life Cycle	4th Jun 2020

Evaluation & Participation Certificate:

After completion of sessions, online exam would be conducted and students who clear it would be provided with participation certificate from C-DAC.
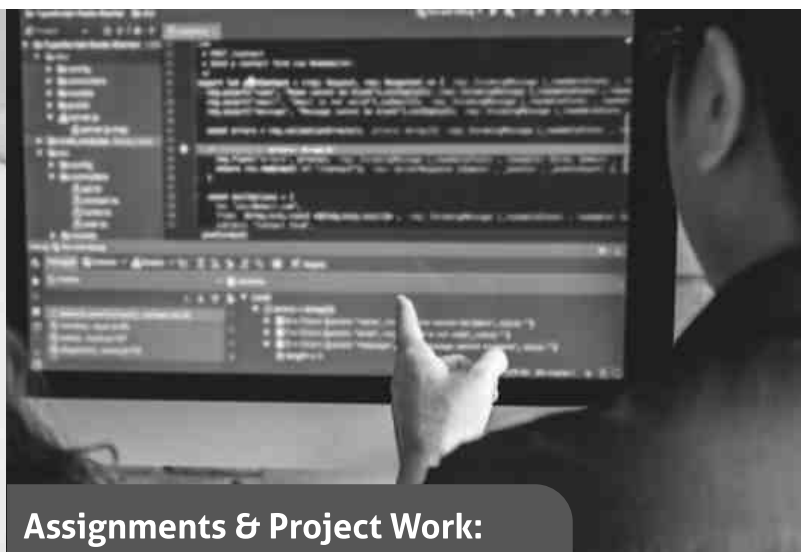
Assignments & Project Work:

Students would be provided with assignments after each session for further exploration. After the completion of online sessions, students would be provided with problem statement, detailed description & required software tools for executing a project. They can work on project for 3 to 4 weeks duration.

Speakers

Sessions would be delivered by Cyber Security team of C-DAC. Team has wide experience in R&D, skill based training, security audit and awareness generation in Cyber Security domain. They have developed various end point security solutions such as USB Pratirodh, AppSamvid, M-Kavach and Browser JSGuard.

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Online Course on
IoT Bootcamp

Concept:

The sessions will cover in-depth concepts on IoT such as
- IoT Architecture
- IoT Case studies
- IoT Ecosystem
- IoT Communication Technologies which includes LPWAN protocols (LoRa, NB-IoT etc.)
- IoT Networking, Application Layer protocols and Cloud Platforms
- I-P-P model (Idea to Prototype to Product)

Learning Outcome:

- Understand the definition and significance of the Internet of Things (IoT)
- Discuss on IoT ecosystem, architectures and case studies
- Develop skills that are necessary in designing, building, testing and implementing an IoT based prototype, product/ solution.

Total talks in the series : 8

Who can attend ? : B.E, B.Tech, ME, MS, MCA or any post graduate or any equivalent 3rd or final year students (Electronics and Computer Science)
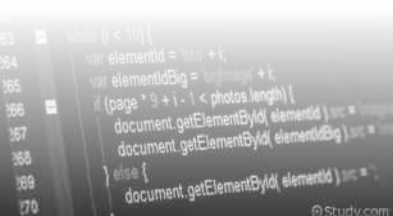
Prerequisites:

- C programming
- Data Communications and Networking
- Basic understanding of Wireless Communication
- Working with Microcontroller based development boards

Duration of each session:

11:00 a.m to 12:00 noon

Topic	Date
IoT Architecture	12th May 2020
IoT Case studies	15th May 2020
IoT Ecosystem	19th May 2020
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I-P-P model (Idea to Prototype to Product): Part V- Prototype to Product, Understand the challenges	5th Jun 2020

Evaluation & Participation Certificate:

After online sessions, online exam would be conducted and participants who clear it would be provided with participation certificate from C-DAC. Participants would be provided with assignments after each session for further exploration.

Project Work:

After the completion of online sessions, participants would be provided with problem statement, detailed description & required software tools for executing a project. They can work on project for 3 weeks duration till Jun end 2020

" Speaker Profile:

Dr. S.V.Srikanth has been associated with C-DAC Hyderabad for the last 16+ years in the field of IoT and Embedded System Design. Currently he is designated as Joint Director. He obtained Masters in Networking and Telecom systems from UK and Ph.D. in the area of Wireless Heterogeneous Networks from JNT University, Hyderabad, India. His areas of interest include Internet of Things (IoT), Ubiquitous Computing, Wireless Technologies, Embedded System Design and Mobile Com-munications. He is a member of CSI SIG for IoT. He has executed around 13 projects and has published 19 papers in various journals and conferences. He has also delivered talks in number of na-tional workshops and conferences. "

Dr. S.V.Srikanth
Joint Director

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Supported by

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CENTRE FOR DEVELOPMENT OF ADVANCED COMPUTING
इलेक्ट्रॉनिकी और सूचना प्रौद्योगिकी मंत्रालय की वैज्ञानिक संस्था, भारत सरकार
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Hyderabad - 501510