



EASTPOINT COLLEGE OF ENGINEERING  
AND TECHNOLOGY

Department of CSE(IoT & CSBT)

IoT

KALAKAWA



Volume 1

Issue 1

"The whole purpose of education is to turn mirrors  
into windows"

---



**Smt. B.L. Ramadevi**  
Chairperson, EPGI

---

*"I believe that the newsletter will serve as a window through which the complete profile of the academic and co-curricular activities, achievements and progress made during the stipulated period can be viewed"*

"A teacher and his way of thinking that's what is most important in any education system."

---



---

Mr. S. V. Pramod  
Gowda  
CEO, EPGI.

---

"The newsletter which is being rolled out today marks the launch of an effervescent activity that would enable the Management to bring out to the eyes of the competitive world, the academic achievements of our prestigious institution. This has been made possible with the collaborative effort of the Management, the Staff and the Students. I congratulate everyone for their commitment."

"The quality of an education system can never exceed the quality of its teachers."



—  
Mr. S. V. Rajiv  
Gowda  
CEO, EPGI.  
—

"It is my pleasure to congratulate the editorial board on this pleasant occasion of releasing the newsletter for the period June to March 2024. I, heartily congratulate the entire team for the hard work and dedication that has resulted in the publication of the newsletter. I extend my warm wishes to the department and continue this journey on the road of excellence."

"There are two educations. One should teach us how to make a living and the other how to live"



Dr. S PRAKASH

SVP - EPCET

---

"I am happy to note that the Department of CSE – (IoT & CSBT) is bringing out the first quarterly magazine " IoT Kalarawa " of the department. This Magazine is a mode of communication to unleash the rapid changes, growth, achievements of students & faculties in the department".

"Wish you all the success and hope to see many more issues to the magazine".



---

## Dr. T.K Thivakaran

IQAC Dean & Professor

---

*I am honored to witness the incredible growth and achievements of our students. Each day, I am inspired by their passion for learning, their innovative ideas, and their commitment to making a positive impact on the world. Our college is a vibrant community of scholars, where students are encouraged to explore their interests, pursue their goals, and embrace new opportunities. It is truly a privilege to be part of their educational journey, and I am excited to see what the future holds for each and every one of them.*

---



---

**Dr. Mrityunjaya  
V Latte**  
Principal, EPCET

---

*Our Institute is student centric and foster active lifelong learning and promotes healthy student development. Education is identified on three main concepts creation of Knowledge, Dissemination of Knowledge and Application of Knowledge.*



---

# Dr. Nanda Ashwin

## HOD CSE-(IoT & CSBT)

---

"It gives me immense pleasure to note that the first Newsletter of CSE-(IoT & CSBT) is being released. When we have a glance at the Newsletter, it is heartening to see that training the head and the heart of staff and students had quietly happened over the past six months.

The staff and students will get more recognition when the awards/achievements they won are publicized through the Newsletter. It would definitely be an inspiration and motivation for other students and staff to scale newer heights. Our current newsletter "INVISION" is an attempt to help acquire new and better forms of knowledge. Sincerely, encourages faculties, students and parents to get connected and foster academic excellence."





**EAST  
POINT**

**COLLEGE OF ENGINEERING &  
TECHNOLOGY**

---

## **DEPARTMENT OF CSE (IoT & CSBT)**

---

### **VISION**

- To be the foremost innovator and leader in the field of IoT and Cyber security, driving the evolution of secure and connected technologies, ensuring the trust and safety of digital ecosystems worldwide.

### **MISSION**

- M1: We are dedicated to advancing digital trust by pioneering cutting-edge solutions that secure IoT devices, networks, and data, guaranteeing the reliability and privacy of the connected world.
- M2: Our mission is to continuously innovate and develop robust cyber security technologies that proactively anticipate and counter emerging threats, fostering a secure environment for IoT applications.
- M3: We are committed to educating and empowering businesses, individuals, and communities through extensive training and awareness programs, equipping them with the knowledge to defend against cyber threats.



**EAST  
POINT**

**COLLEGE OF ENGINEERING &  
TECHNOLOGY**

---

## **DEPARTMENT OF CSE (IoT & CSBT)**

---

### **Program Educational Objectives (PEO's):**

**PEO1:**

Graduates will have successful careers in IoT and Cybersecurity or related fields, demonstrating expertise and leadership in securing and managing interconnected systems.

**PEO2:**

Graduates will engage in lifelong learning and professional development, staying current with evolving technologies and security threats to adapt to changing industry demands.

**PEO3:**

Graduates will possess the skills to analyse and solve complex IoT and cybersecurity challenges, applying critical thinking, ethical decision-making, and innovative approaches.

### **Program Specific Outcomes (PSO's):**

**PSO1:**

Graduates will be proficient in understanding, configuring, and securing IoT devices, networks, and platforms, including familiarity with IoT protocols and technologies.

**PSO2:**

Graduates will have expertise in securing IoT devices, including hardware security, firmware integrity, and encryption of data at rest and in transit.

**PSO3:**

Graduates will possess the skills to conduct digital forensics investigations in IoT environments to trace and analyse security incidents.

# MESSAGE FROM EDITORIAL TEAM

At the outset, on behalf of the entire CSE(IOT&CSBT) and all the readers, We extend our whole hearted gratitude to the Management, Principal DR.Mrityunjaya V Latte , to our HOD, Dr.Nanda Ashwin for their dynamic, inspirational, enthusiastic contribution and motivation towards our department also boosting our confidence for the publication of first Issue of our quarterly magazine "IOT KALARAWA". A lot of effort has gone into the making of this issue. We have made an attempt to bring out the talent concealed within our student and faculty community. This issue includes articles, poems, art-works, and a host of other things. The newsletter is the combined effort of the editorial team. Our endeavour with each edition is to update you on the latest trends of technologies coming up and flashing some light on the innovative minds of the youth today.

## OUR TEAM



**PROF. JAY PRAKASH  
MALVIYA**



**BASAVA SAGAR S**  
1EP23IC013



**SHREYA SRIVASTAVA**  
1EP23IC057



**ROSHINI J  
VISHWAKARMA**  
1EP23IC051



**ABINAYA FRANCISCA  
EP**  
1EP23IC002



**VISHAL BHARADWAJ**  
1EP22IC060

---

# PREFACE

01

ABOUT THE DEPARTMENT

02

STAFF OF CSE(IOT & CSBT)

03

WORKSHOP DESIGN AND INNOVATION

04

TECHNICAL TALK ON EDGE AI

05

INFOX

06

INDUSTRIAL VISIT

07

STUDENTS' ACHIEVEMENT

---



# About the department

---

## ABOUT CSE(IoT&CSBT) DEPARTMENT

The Internet of Things (IoT) Department at our VTU-affiliated college, established in 2023, offers a cutting-edge curriculum focused on integrating hardware, software, and networking to create smart systems. Students explore sensor technology, embedded systems, wireless communication, data analytics, and cybersecurity through a blend of theoretical and hands-on learning. The department features state-of-the-art labs and industry partnerships, providing internships and real-world project opportunities. Additionally, students can enhance their knowledge through government-offered courses such as NPTEL, ensuring a comprehensive and up-to-date education in IoT.

## DYNAMIC FACULTY

The faculty of the IoT department are dedicated experts with diverse backgrounds in electronics, computer science, and networking. They are committed to fostering innovation and practical skills, guiding students through cutting-edge research and industry applications. Their combined experience and passion for technology ensure a dynamic learning environment that prepares students for the evolving IoT landscape.

## INDUSTRY INTEGRATED LEARNING PROGRAM(IILPs)

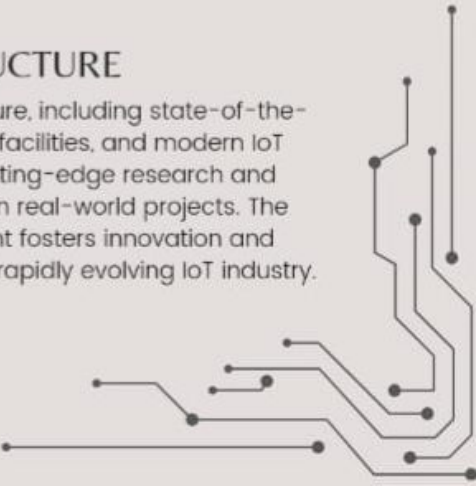
Industry Integrated Learning Programs (IILPs) are educational initiatives designed to bridge the gap between academic knowledge and practical industry skills. These programs involve a partnership between educational institutions and industry organizations, allowing students to gain hands-on experience while pursuing their academic studies. Typically, students participate in internships, co-op programs, or project-based learning that is directly relevant to their field of study.

## VIBRANT LEARNING EXPERIENCES

The Internet of Things (IoT) and Cybersecurity department in college offers a dynamic and immersive learning experience that prepares students for the fast-evolving tech landscape. The curriculum blends theoretical knowledge with hands-on practice, emphasizing real-world applications and emerging technologies. Students engage in projects that involve designing and securing IoT devices, learning about network protocols, encryption, and ethical hacking. The department often collaborates with industry partners, providing internships and practical workshops led by experts. This vibrant educational environment fosters innovation, critical thinking, and a proactive approach to tackling contemporary cybersecurity challenges.

## ADVANCED INFRASTRUCTURE

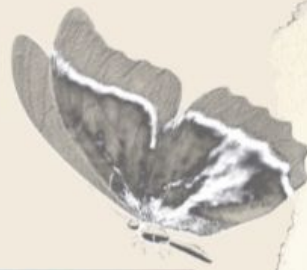
The IoT department boasts advanced infrastructure, including state-of-the-art laboratories, high-performance computing facilities, and modern IoT development kits. These resources support cutting-edge research and hands-on learning, enabling students to work on real-world projects. The department's robust technological environment fosters innovation and ensures students gain practical experience in the rapidly evolving IoT industry.



# STAFF OF CSE(IOT & CSBT)

S No.	NAME	DESIGNATION
01	Dr. T.K Thivakaran	IQAC Dean & Professor
02	Dr. Nanda Ashwin	Head of department & Professor
03	Prof. Purushothaman M	Assistant Professor
04	Prof. Jay Prakash Malviya	Assistant Professor
05	Prof. Anila Davis	Assistant Professor
06	Prof. Dhivya K	Assistant Professor
07	Prof. Shivani Gautam	Assistant Professor

# memories



## DEPT CSE(IOT-CSBT)

# WORKSHOP

## Design Thinking, Critical Thinking and Innovative Design

Prof Purushothaman CSE –(IoT & CSBT) EPCET introducing the Resource person Mr. Dr. JAGANATH M And Prof LOHIT C. who is subject expert in AI also addressed the students and faculties and motivated everyone in the session. Students attending the workshop and interested in knowing about the technology to implement their projects in various field.



*“One day workshop on Design Thinking, Critical Thinking And Innovation Design”*

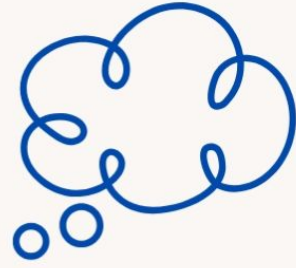
Conducting workshops on design thinking, critical thinking, and innovation design equips IoT engineering students with the skills to create user-centric, innovative solutions. These approaches enhance problem-solving, creativity, and ethical considerations, fostering interdisciplinary collaboration and a competitive edge.



## Outcome of the workshop

The workshop successfully equipped IoT engineering students with crucial skills in design thinking, critical thinking, and innovation design. They are now better prepared to develop innovative, user-centric IoT solutions and tackle real-world challenges effectively.





Prof Purushothaman CSE-(IoT & CSBT) EPCET introducing the Resource person Mr.SUNIL KUMAR who is subject expert in AI also addressed the students and faculties and motivated everyone in the session. Students attending the workshop and interested in knowing about the technology to implement their projects in various field Edge AI refers to the deployment of artificial intelligence (AI) algorithms directly on edge devices, such as sensors, smartphones, or IoT devices, enabling real-time data processing and inference at the source of data generation.

## *TECHNICAL TALK* *ON EDGE AI*



In an edge AI workshop, we'd delve into deploying AI algorithms directly on devices like sensors, smartphones, or IoT devices, reducing reliance on cloud computing. Topics could include optimizing models for resource-constrained environments, latency considerations, and privacy concerns with on-device processing. We'd also discuss edge computing frameworks like TensorFlow Lite or ONNX Runtime for efficient inference. Plus, exploring real-world use cases from healthcare to smart homes would illustrate the practical applications of edge AI.

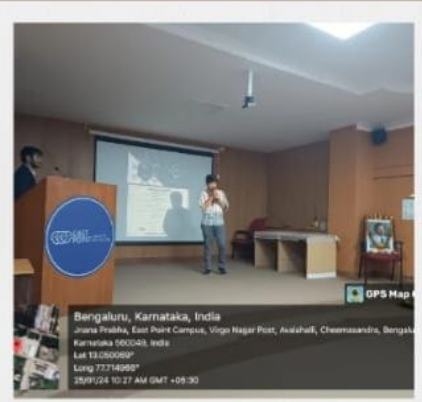




Bengaluru, Karnataka, India  
3P28+25M, Cheemasandra, Bengaluru, Karnataka 560049, India  
Lat 13.049968°  
Long 77.714996°  
25/01/24 10:09 AM GMT +05:30



Bengaluru, Karnataka, India  
3P28+25M, Cheemasandra, Bengaluru, Karnataka 560049, India  
Lat 13.049968°  
Long 77.714987°  
25/01/24 10:25 AM GMT +05:30



Bengaluru, Karnataka, India  
Jyoti Trishu, East Point Campus, Virgo Nagar Post, Anahalli, Cheemasandra, Bengaluru, Karnataka 560049, India  
Lat 13.050099°  
Long 77.714999°  
25/01/24 10:27 AM GMT +05:30



Bengaluru, Karnataka, India  
3P28+25M, Cheemasandra, Bengaluru, Karnataka 560049, India  
Lat 13.049968°  
Long 77.728316°  
25/01/24 10:05 AM GMT +05:30

**EAST POINT COLLEGE OF ENGINEERING & TECHNOLOGY**  
Affiliated to VTU, approved by AICTE, New Delhi  
Department of ISE AND CSE (KIT & CSIT)

**InfoX 2K24**  
INTERCOLLEGE TECHNICAL FEST

**LIST OF EVENTS**

- 1) AI & Treasure Hunt
- 2) Code Snuggling
- 3) Technical Quiz
- 4) Quiz Round
- 5) Design Matrix
- 6) Technical Debate

**START JURY ON FEBRUARY 01, 10:00 AM (TENTATIVE)**

**25th January 2024 | EPCET Campus**

Dr. Sampath K. Dr. Hema Sarda Dr. Maheshwari Y. Lakshmi



Bengaluru, Karnataka, India  
3P28+25M, Cheemasandra, Bengaluru, Karnataka 560049, India  
Lat 13.049968°  
Long 77.714988°  
25/01/24 10:01 AM GMT +05:30



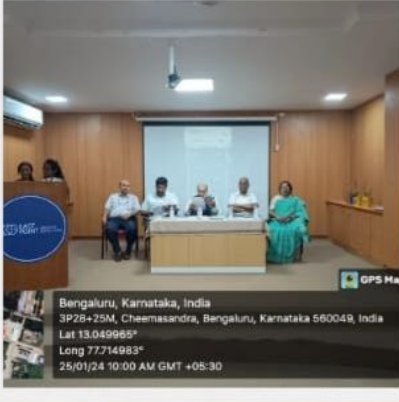
Bengaluru, Karnataka, India  
3P28+25M, Cheemasandra, Bengaluru, Karnataka 560049, India  
Lat 13.049968°  
Long 77.714996°  
25/01/24 10:08 AM GMT +05:30



Bengaluru, Karnataka, India  
3P28+25M, Cheemasandra, Bengaluru, Karnataka 560049, India  
Lat 13.049972°  
Long 77.714986°  
25/01/24 10:03 AM GMT +05:30



Bengaluru, Karnataka, India  
3P28+25M, Cheemasandra, Bengaluru, Karnataka 560049, India  
Lat 13.049969°  
Long 77.714987°  
25/01/24 10:28 AM GMT +05:30

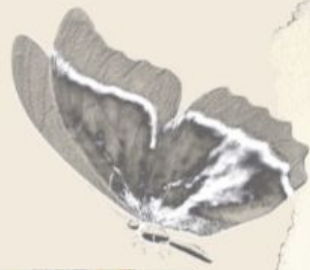


Bengaluru, Karnataka, India  
3P28+25M, Cheemasandra, Bengaluru, Karnataka 560049, India  
Lat 13.049968°  
Long 77.714983°  
25/01/24 10:00 AM GMT +05:30



Bengaluru, Karnataka, India  
3P28+25M, Cheemasandra, Bengaluru, Karnataka 560049, India  
Lat 13.049972°  
Long 77.714988°  
25/01/24 10:04 AM GMT +05:30

memories



**DUSSEHRA FESTIVAL**



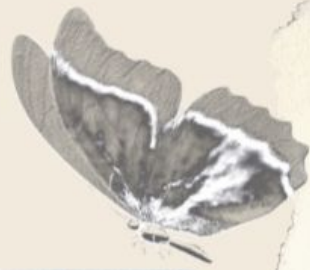
# INDUSTRIAL visit

## MICROSOFT

Exciting insights at the [#microsoftazurestartupmixer](#) Honored to have had [PS Pranika](#) share their expertise. The session on Generative AI and Marketing was enlightening, showcasing its transformative power in understanding today's marketing landscape. Exploring the intersection of AI and marketing strategies offers a deeper comprehension of consumer behavior and content personalization. Grateful for the opportunity to delve into cutting-edge techniques reshaping the industry! 🚀



# MEDTECH CONCLAVE



# Certificate of Achievement

The Company acknowledges and awards



## COURSE COMPLETION CERTIFICATE

The certificate is awarded to

**UPASAN R K**

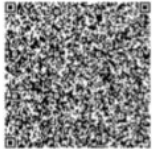
for successfully completing the course

**Java Concepts**

on February 16, 2024

**Infosys | Springboard**

*Congratulations! You make us proud!*



Issued on Saturday, February 17, 2024  
To verify, scan the QR code at <https://certificates.infosys.com>

  
Thirumala Arathi  
Senior Vice President and Head  
Education, Training and Assessment (ETA)  
Infosys Limited



## COURSE COMPLETION CERTIFICATE

The certificate is awarded to

**VIVEK TARNALLYA**

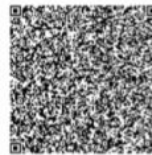
for successfully completing the course

**Java Concepts**

on February 4, 2024

**Infosys | Springboard**

*Congratulations! You make us proud!*



Issued on Tuesday, February 6, 2024  
To verify, scan the QR code at <https://certificates.infosys.com>

  
Thirumala Arathi  
Senior Vice President and Head  
Education, Training and Assessment (ETA)  
Infosys Limited



## COURSE COMPLETION CERTIFICATE

The certificate is awarded to

**CHANDRIKA S S**

for successfully completing the course

**Java Concepts**

on January 24, 2024

**Infosys | Springboard**

*Congratulations! You make us proud!*



Issued on Wednesday, January 31, 2024  
To verify, scan the QR code at <https://certificates.infosys.com>

  
Thirumala Arathi  
Senior Vice President and Head  
Education, Training and Assessment (ETA)  
Infosys Limited



## COURSE COMPLETION CERTIFICATE

The certificate is awarded to

**VIVEK TARNALLYA**

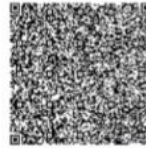
for successfully completing the course

**Beginning Data Structures and Algorithms in C#**

on February 4, 2024

**Infosys | Springboard**

*Congratulations! You make us proud!*



Issued on Tuesday, February 6, 2024  
To verify, scan the QR code at <https://certificates.infosys.com>

  
Thirumala Arathi  
Senior Vice President and Head  
Education, Training and Assessment (ETA)  
Infosys Limited



## COURSE COMPLETION CERTIFICATE

The certificate is awarded to

**CHANDRIKA S S**

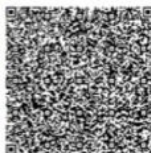
for successfully completing the course

**Beginning Data Structures and Algorithms in C#**

on January 31, 2024

**Infosys | Springboard**

*Congratulations! You make us proud!*



Issued on Thursday, February 1, 2024  
To verify, scan the QR code at <https://certificates.infosys.com>

  
Thirumala Arathi  
Senior Vice President and Head  
Education, Training and Assessment (ETA)  
Infosys Limited

# STUDENT ACHIEVEMENT

Google Digital Garage

## Vishal Bharadwaj

is hereby awarded this certificate of achievement for the successful completion of **The Fundamentals of Digital Marketing** certification exam on 09/07/2023

*Must Botic*  
President - Google EMEA



*Tobias von Amels-Beckler*  
CEO - IAB Europe

certificate ID: GGP 568 62K

verify the authenticity of this certificate at: <https://learn.digital.withgoogle.com/track/1046464646>



## Certificate of Completion

For: Vishal Bharadwaj

**Ethical Hacking: Understanding Ethical Hacking**

by Dale Meredith

Duration: 7 hrs 37 min  
Completed: Apr 26, 2020

REP ID: 427



PLURALSIGHT

**CERTIFICATE OF ACHIEVEMENT**

has been awarded to

**Vivek Tarnallya**

for successful completion of

**Web Development**

This curriculum provides

- an understanding of the core concepts of programming using JavaScript, the HTML knowledge required to create web pages, and the ability to style pages using CSS.
- the practical experience needed to combine these technologies and publish a website on the internet.

*Johannes Berger*  
CEO, Mimo

09 / December / 2022  
Issued on

**CERTIFICATE OF ACHIEVEMENT**

has been awarded to

**Vivek Tarnallya**

for successful completion of

**Python**

This curriculum provides

- an understanding of the core concepts needed to program in Python, including data structures, control statements, functions, and modules.

*Johannes Berger*  
CEO, Mimo

09 / December / 2022  
Issued on

# STUDENT ACHIEVEMENT

**Networking**  
**CISCO** Academy

## Certificate of Course Completion

**Vishal Bharadwaj**

has successfully achieved student level credential for completing the Introduction to Cybersecurity course.

The student was able to proficiently:

- Explain the basics of being safe online, including what cybersecurity is and its potential impact.
- Explain the most common cyber threats, attacks, and vulnerabilities.
- Explain how to protect oneself while online.
- Explain how organisations can protect their operations against these attacks.
- Access a variety of information and resources to explore the different career options in cybersecurity.



*Laura Quintana*  
Laura Quintana  
Vice President and General Manager  
Cisco Networking Academy

**Infosys**  
Navigate your next

## COURSE COMPLETION CERTIFICATE

The certificate is awarded to  
**Vishal Bharadwaj**  
for successfully completing the course  
**Beginning Data Structures and Algorithms in C#**  
on February 4, 2024

**Infosys | Springboard**  
Congratulations! You make us proud!



*Jana*  
Theravada Ansh  
Senior Vice President and Head  
Education, Training and Assessment (ETA)  
Infosys Limited

## Certificate of Completion

For: Vishal Bharadwaj

**Core Python: Classes and Object-orientation**  
by Robert Smalshire, Austin Bingham

Duration: 2 hrs 55 min  
Completed: Apr 28, 2021



## Certificate of Completion

For: Vishal Bharadwaj

**Understanding Machine Learning**  
by David Chappel

Duration: 0 hrs 43 min  
Completed: Apr 9, 2021



## Certificate of Completion

For: Vishal Bharadwaj

**Excel 2019 Essentials**  
by Bill Kullterman

Duration: 2 hrs 5 min  
Completed: Apr 30, 2020





## Certificate of Completion

For: Vishal Bharadwaj

**Ethical Hacking: Understanding Ethical Hacking**  
by Dale Meredith

Duration: 7 hrs 37 min  
Completed: Apr 26, 2020





# CISCO

## Certificate of Achievements

Networking  
**CISCO** Academy

### Certificate of Course Completion

Upasan R K

has successfully achieved student level credential for completing the Introduction to Data Science course.

The student was able to proficiently:

- Explain the structure and characteristics of data analytics.
- Explain the role of data in Artificial Intelligence.
- Explain different options to obtain a career in Data Analytics.



*Laura Quintana*

Laura Quintana  
Vice President and General Manager  
Data Networking Academy

04/12/2023

Networking  
**CISCO** Academy

### Certificate of Course Completion

Chandrika Uma

has successfully achieved student level credential for completing the Introduction to Cybersecurity course.

The student was able to proficiently:

- Explain the basics of computer systems, including what cybersecurity is and its various threats.
- Explain the most common cyber threats, attacks, and vulnerabilities.
- Explain how to protect oneself while online.
- Explain how organizations can protect their operations against these attacks.
- Access variety of information and resources to explore the different career options in cybersecurity.



*Laura Quintana*

Laura Quintana  
Vice President and General Manager  
Data Networking Academy

04/11/2023

Networking  
**CISCO** Academy



### Statement of Achievement

Chandrika Uma

has successfully achieved student level credential for completing the Python Essentials 2 course, provided by Cisco Networking Academy in collaboration with OpenEDG Python Institute.

The graduate is able to proficiently:

- Design, develop, debug, test, and refactor small-to-medium complex programs written in Python 3.
- Analyze and troubleshoot the problems in OOP paradigms.
- Use the potential of Python in web applications, including API and GUI activities.
- Understand the role of a programmer in the software development process.
- Interpret the application PCAP - Certified Associate 1 Python Programming from OpenEDG Python Institute and continue their professional development in an advanced level.



*Laura Quintana*

Laura Quintana  
Vice President and General Manager  
Data Networking Academy

04/09/2023

# Certificate OF ACHIEVEMENT

## MathWorks & Simulink

 MathWorks | Training Services

### Course Completion Certificate

Vivek Tarnallya

has successfully completed **100%** of the self-paced training course

SIMULINK Onramp

  
DIRECTOR, TRAINING SERVICES

7 September 2023

 MathWorks | Training Services

### Course Completion Certificate

Upasan R K

has successfully completed **100%** of the self-paced training course

SIMULINK Onramp

  
DIRECTOR, TRAINING SERVICES

10 September 2023

 MathWorks | Training Services

### Course Completion Certificate

Vivek Tarnallya

has successfully completed **100%** of the self-paced training course

MATLAB Onramp

  
DIRECTOR, TRAINING SERVICES

6 September 2023

 MathWorks | Training Services

### Course Completion Certificate

Upasan R K

has successfully completed **100%** of the self-paced training course

SIMULINK Onramp

  
DIRECTOR, TRAINING SERVICES

10 September 2023

 MathWorks | Training Services

### Progress Report

Name: Chandrika S  
Course: MATLAB Onramp  
Progress: **100%** complete (as of 11 September 2023)

#### Chapters

- |                                    |      |                   |      |
|------------------------------------|------|-------------------|------|
| 1. Course Overview                 | 100% | 12. Programming   | 100% |
| 2. Commands                        | 100% | 13. Final Project | 100% |
| 3. MATLAB Desktop and Editor       | 100% | 14. Conclusion    | 100% |
| 4. Vectors and Matrices            | 100% |                   |      |
| 5. Array Indexing and Modification | 100% |                   |      |
| 6. Array Calculations              | 100% |                   |      |
| 7. Function Calls                  | 100% |                   |      |
| 8. Documentation                   | 100% |                   |      |
| 9. Plots                           | 100% |                   |      |
| 10. Data Import                    | 100% |                   |      |
| 11. Logical Arrays                 | 100% |                   |      |

Release: R2023a | Language: English

VOLUME 1  
ISSUE 1



Jnana Prabha, East Point Campus, Virgo Nagar Post, Avalahalli,  
Bengaluru  
Karnataka 560049  
Website: [www.eastpoint.ac.in](http://www.eastpoint.ac.in)

---

**EAST POINT**  
COLLEGE OF ENGINEERING &  
TECHNOLOGY