# FDP REPORT ON "FULL STACK AI WEB DEVELOPMENT"

**Date:** 20/01/2025 – 25/01/2025
**Institute Name:** East Point College of Engineering and Technology, Bangalore

AICTE TRAINING AND LEARNING ACADEMY

# ATAL FDP on Full Stack AI Web Development

## Full Stack AI Web Development

ATAL 6-Days AICTE sponsored offline FDP was conducted from 20<sup>th</sup> to 25<sup>th</sup> January 2025 in which 50 participants from different parts of the country participated.

The speakers for the 6-Days FDP on "Full Stack AI Web Development" were:

### Mr Kiran M



**Senior Full Stack Web Developer**
**Eigital Pvt. Ltd**
**Mumbai, Maharashtra**

### Mr. Nikhil Jain C S



**Founder & CEO**
**Vision Astraa Startup Academy**
**Bangalore**

### Mr. Satisha V



**Senior Manager**
**HP Pvt. Ltd**
**Bangalore**

## Mr. Koushik M S

**Software Engineer**
**SST Technologies**
**Bangalore**

## Mr. Pavan Kumar E

**Sr. Design Engineer**
**Venky Labs**
**Bangalore**

## FDP Brochure

### AICTE SPONSORED ATAL
### 6 DAYS FACULTY DEVELOPMENT PROGRAMME
*On*

## FULL STACK AI WEB DEVELOPMENT

### HOSTED BY

**EAST POINT COLLEGE OF ENGINEERING & TECHNOLOGY**

AN AUTONOMOUS INSTITUTION AFFILIATED TO VTU & ACCREDITED BY NBA - CSE, ECE & ISE

East Point College of Engineering and Technology (EPCET), established in 1999 by the M.G. Charitable Trust in Bangalore, is affiliated with Visvesvaraya Technological University (VTU) and offers AICTE-approved undergraduate and postgraduate programs in engineering and technology, including emerging fields like AI, IoT, and cyber security. Accredited by NBA (2023-2026), the college has over 120 faculty members, a quarter with Ph.D. qualifications, actively engaging in research and collaboration with prestigious institutions like DRDO. With a Wi-Fi-enabled campus, modern labs, a library housing over 50,000 books, and industry-standard resources, EPCET emphasizes holistic education, offering internships, strong placement opportunities, and skill development programs with partners like AWS, Salesforce, UiPath-RPA, CISCO, and Google Cloud. The College has set an ambitious vision and it's working continuously to adapt newer concepts in teaching, learning, and student assessments to realize its vision through working on its mission. The college fosters a vibrant student life with clubs, intercollegiate events, and multidisciplinary interactions while promoting faculty development and global collaborations.

**COORDINATOR**

Dr. Komala C. R, Professor,
Dept of ISE, EPCET
Mobile No: 9844275912

Management, Principal and Staff

**Date : 20.01.2025 to 25.01.2025**
**Duration : 9:00 AM to 5:00 PM**
**Venue: East Point College of Engineering and Technology**

### ABOUT THE FDP

The FDP focuses on AI technologies to enable personalization, dynamic content generation, and adaptive user interfaces, allowing dedicated developers to create tailored web experiences that cater to individual preferences and needs. Developers should embrace the opportunities that AI brings and leverage its power to create efficient, innovative, and engaging applications. The full-stack machine learning development is a comprehensive approach to build an end-to-end machine learning systems. A Full Stack Web Developer is responsible for designing, developing, and maintaining web applications and websites.

### WHAT'S THE BUZZ

1. To demonstrate the installation of Python, Django and Visual Studio code editors.
2. To create the virtual environment, Django project and App.
3. To inherit the layout.html and the creation of additional pages of website.
4. To develop a Django app for the registration of a course and to display the registered list for the selected course.
5. To create the course as models with enrolment as Many to Many field.

### WHY YOU SHOULD ATTEND

1) Hands-on experience to bring your ideas to life.
2) Exclusive insights from industry experts. Preparedness for certification
3) Add real-world AI projects to your portfolio!

### YOUR FUTURE CAREER AWAITS

This participation will lead you to take up a career path like:
- Full Stack AI Developer
- Machine Learning Engineer
- AI Product Developer
- Web Application Architect
- Cloud AI Specialist

### REGISTRATION PROCESS

- The Faculty members of the AICTE approved institutions, Research Scholars, PG Scholars and Faculty of host institutions are also eligible to attend the program Number of participants is limited to 50 and registrations accepted will be based on first come first serve basis. Selected candidates will be intimated by email only.

- Faculty Members selected for the programme should get the authorization certificates signed from the Principal.

- The Certificates shall be issued by ATAL academy

- No registration fee for the participants Register through: https://aicte-india.org/atal and Click on signup or login as a participant.

- The Certificates shall be issued to those participants who have attended the program with a minimum of 80% attendance along with one Assessment, 2 page write up of article summary, successful completion of practical session, report writing on industrial visit, reflection journal and to be obtained with a score of minimum 70% marks in the test conducted at the end/ during FDP.

**Last Date for Registration :** 11/01/2025

**Acceptance Notification : 13/01/2025**
Note: This FDP will be conducted in offline mode

# ATAL FDP on Full Stack AI Web Development

## FDP Schedule

| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 6 |
|---|---|---|---|---|---|
| **9:00 – 9:30**<br>**Inauguration** | | | | | |
| **9:30 – 12:00**<br>**Session 1**<br><br>**Name of the Expert:**<br>Mr. Kiran M and Team<br><br>**Organization:**<br>Eigital Pvt. Ltd<br><br>**Topic to be taught:**<br>Creation of virtual environment, Django project and App | **9:30 – 12:00**<br>**Session 3**<br><br>**Name of the Expert:**<br>Nikhil Jain C S,<br>Mr. Kiran M and Team<br><br>**Organization:**<br>Vision Astraa Startup Academy<br><br>**Topic to be taught:**<br>Developing a Django app with display | **9:30 – 12:00**<br>**Session 5**<br><br>**Name of the Expert:**<br>Satisha V, Mr. Kiran M and Team<br><br>**Organization:**<br>HP Pvt. Ltd<br><br>**Topic to be taught**:<br>Inherit the layout.html and creation of additional pages | **9:30 – 12:00**<br>**Session 7**<br><br>**Name of the Expert :**<br>Mr. Koushik M S and Team<br><br>**Organization:**<br>SST Technologies<br><br>**Topic to be taught:**<br>Developing the Django app by integrating AI into applications | **9:00 – 1:00**<br>**Industrial visit**<br><br>**Name of the Organization:**<br>Kalvium<br><br>**Complete address with pin code :**<br>403, 22nd Cross Rd, Parangi Palaya, BDA Layout, HSR Layout, Bengaluru, Karnataka 560034 | **9:30 – 12:00**<br>**Session 10**<br><br>**Name of the Expert :**<br>Pavan Kumar E<br><br>**Organization:**<br>Venky Labs<br><br>**Topic to be taught:**<br>Building intuitive and user-friendly interfaces to enhance the customer satisfaction. |
| **12:00 – 1:00**<br>**Article Discussion**<br><br>**1.Title of the Research Paper :**<br>Innovative Cost Estimation for Agile Technology: A Novel Energy Storage Technique Incorporating Modified Planning Poker<br>**2. Name of the journal:**<br>International Journal of Renewable Energy Research,<br>**3. Year of Publication:** 2023 | **12:00 – 1:00**<br>**Article Discussion**<br><br>**1.Title of the Research Paper :**<br>Multi-UAV computing Enabling efficient clustering-based IoT for energy reduction and data transmission"<br>**2. Name of the journal:**<br>Journal of Intelligent and Fuzzy Systems<br>**3. Year of Publication:** 2023 | **12:00 – 1:00**<br>**Article Discussion**<br><br>**1.Title of the Research Paper :**<br>Deep Learning for an Innovative Photo Energy Model to Estimate the Energy Distribution in Smart Apartments<br>**2. Name of the journal:**<br>Hindawi, International Journal of Photo energy,<br>**3. Year of Publication:** 2022 | **12:00 – 1:00**<br>**Article Discussion**<br><br>**1.Title of the Research Paper :**<br>Implementation of multimedia generation using Deep Learning and Neural Network<br>**2. Name of the journal:**<br>Journal of Emerging Technologies and Innovative Research<br>**3. Year of Publication:** 2023 | **Industry Type:**<br>Software Company<br><br>**Area of specification:**<br>Artificial Intelligence | **12:00 – 1:00**<br><br>**Article Summary:**<br><br>Interaction on the enhancement of Article one to four |
| **1:00 – 2:00**<br><br>**Lunch** | **1:00 – 2:00**<br><br>**Lunch** | **1:00 – 2:00**<br><br>**Lunch** | **1:00 – 2:00**<br><br>**Lunch** | **1:00 – 2:00**<br><br>**Lunch** | **1:00 – 2:00**<br><br>**Lunch** |
| **2:00 – 4:30**<br>**Session 2**<br><br>Interactive session on Django project and App | **2:00 – 4:30**<br>**Session 4**<br><br>Interactive session on Developing a Django app with displays | **2:00 – 4:30**<br>**Session 6**<br><br>Interactive session on creation of additional pages | **2:00 – 4:30**<br>**Session 8**<br><br>Interactive session on integrating AI into applications | **2:00 – 4:30**<br>**Session 9**<br><br>Interactive session on Advanced Technologies of Artificial Intelligence | **2:00 – 4:00**<br>**MCQ & Reflection Journal**<br><br>Quiz on Full Stack AI Web Development |
| **4:30 – 5:30**<br><br>**Hands on training /Labs**<br><br>Practice session on Interactive session on Django project and App | **4:30 – 5:30**<br><br>**Hands on training /Labs**<br><br>Practice session on Developing a Django app with displays | **4:30 – 5:30**<br><br>**Hands on training /Labs**<br><br>Practice session on creation of additional pages | **4:30 – 5:30**<br><br>**Hands on training /Labs**<br><br>Practice session on integrating AI into applications | **4:30 – 5:30**<br><br>**Hands on training /Labs**<br><br>Practice session on Advanced Technologies of Artificial Intelligence | **4:00 – 5:00**<br><br>**Valedictory Session** |

# ATAL FDP on Full Stack AI Web Development

## Overview of the FDP:

The inauguration was held on 20th January 2025 offline at 9:30 AM. The Chief Guest of the program was Dr. S. Prakash (Senior Vice President, EPGI), Guest of Honour of the function was Dr. Mrityunjaya V Latte (Principal, EPCET) and Mr. Kiran M (Senior Full Stack Web Developer, Eigital Pvt. Ltd) and the Coordinators Dr. Komala C R & Prof. Teena K B chaired the function. Also, the Director of Academics-EPGI, IQAC Dean-EPGI, Vice-Principal-EPCET, HODs-EPCET and Faculty Members were present with the participants.

Prof. Rebecca Sandra-EPCET addressed the gathering with the welcome speech followed by a prayer song performed by Prof. Neelima Sahu-EPCET. The dignitaries joined lighting the lamp ceremony, felicitation of the guests, the chief guest's address, introduction of chief guests and a Vote of Thanks. The introduction of resource person was delivered by Prof. Shilpa Patil-EPCET and welcomed the resource person to the FDP event. The Guest of Honour Dr. Mrityunjaya V Latte (Principal, EPCET) addressed the participants about the importance of the FDP, Roles and Responsibility in Technical Education, the various initiatives by AICTE and ATAL Academy. The Chief Guest Senior Vice President of East Point Group of Institutions Dr. S. Prakash, discussed about the FDP on "Full Stack AI Web Development" and Outcomes of the Programme. The inaugural function was concluded with the Vote of Thanks.

## Invitation

# ATAL FDP on Full Stack AI Web Development

# ATAL FDP on Full Stack AI Web Development

| SL. No | Name | Institution |
|---|---|---|
| 1 | S. Savitha | East Point College of Engineering and Technology, Bangalore |
| 2 | Udayabalan Balasingam | East Point College of Engineering and Technology, Bangalore |
| 3 | Heena Kousar | East Point College of Engineering and Technology, Bangalore |
| 4 | Janani R | S.E.A College of Engineering and Technology, Bangalore |
| 5 | I Manimozhi | East Point College of Engineering and Technology, Bangalore |
| 6 | V.Santhanam | Rajalakshmi Engineering College, Tamil Nadu |
| 7 | Dr.Sharadha | HKBK College of Engineering, Bangalore |
| 8 | Sreenivasa Rao Amaraneni | East Point College of Engineering and Technology, Bangalore |
| 9 | Shridevi Jeevan Kamble | REVA University, Bangalore |
| 10 | Chandrappa D N | East Point College of Engineering and Technology, Bangalore |
| 11 | Rashmi T V | East Point College of Engineering and Technology, Bangalore |
| 12 | N Gayathri | S.E.A College of Engineering and Technology, Bangalore |
| 13 | Bhavana P | Cambridge Institute of Technology, Bangalore |
| 14 | Rakesh V S | Cambridge Institute of Technology, Bangalore |
| 15 | Pushpalatha K S | Acharya Institute of Technology, Bangalore |
| 16 | G S Arjun | University of Mysore, Mysore |
| 17 | Heena Kouser | HKBK College of Engineering, Bangalore |
| 18 | Daina K K | Coorg Institute of Technology, Ponnampet, Coorg |
| 19 | Prashanthi H C | Coorg Institute of Technology, Ponnampet, Coorg |
| 20 | Akshay G S | University of Mysore, Mysore |
| 21 | Suman | SJC Institute of Technology, Chikkaballapur |
| 22 | Anilkumar Ambore | REVA University, Bangalore |
| 23 | Mala M V | SJC Institute of Technology, Chikkaballapur |
| 24 | Megha Kulkarni | Nitte Meenakshi Institute of Technology, Bangalore |
| 25 | M. Sathya | Nadar Saraswathi College of Engineering and Technology, Tamil Nadu |
| 26 | Bala Murugan R | Ramco Institute of Technology, Tamil Nadu |
| 27 | Vijayakumar.D | National Engineering College, Tamil Nadu |
| 28 | Jayashri M | S.E.A College of Engineering and Technology, Bangalore |
| 29 | Sushma B A | S.E.A College of Engineering and Technology, Bangalore |
| 30 | Rajkumar K | National Engineering College, Tamil Nadu |
| 31 | Malini V L | East Point College of Engineering and Technology, Bangalore |
| 32 | T Thulasi | S.E.A College of Engineering and Technology, Bangalore |
| 33 | Pushplatadubey | Cambridge Institute of Technology, Bangalore |
| 34 | Lakshmishri M S | Cambridge Institute of Technology, Bangalore |
| 35 | Maria Kiran L | Cambridge Institute of Technology, Bangalore |
| 36 | Nanda Ashwin | East Point College of Engineering and Technology, Bangalore |
| 37 | Anil Kumar S | East Point College of Engineering and Technology, Bangalore |
| 38 | Nithyananda C R | East Point College of Engineering and Technology, Bangalore |
| 39 | Shilpa Prabhu Patil | East Point College of Engineering and Technology, Bangalore |
| 40 | Chandramouli H | East Point College of Engineering and Technology, Bangalore |
| 41 | Nilu Mishra | East Point College of Engineering and Technology, Bangalore |
| 42 | Deepa Puranik | New Horizon College of Engineering, Bangalore |
| 43 | M Dhanalakshmi | New Horizon College of Engineering, Bangalore |
| 44 | LubnaTaranum M P | KNS Institute of Technology, Bangalore |
| 45 | Dr.V. Navya | East Point College of Engineering and Technology, Bangalore |
| 46 | Kemparaju N | East Point College of Engineering and Technology, Bangalore |
| 47 | Vaishali Sontakke | East Point College of Engineering and Technology, Bangalore |
| 48 | Bhavya M | East Point College of Engineering and Technology, Bangalore |
| 49 | B.Satheesh Reddy | East Point College of Engineering and Technology, Bangalore |
| 50 | NeelimaSahu | East Point College of Engineering and Technology, Bangalore |

# ATAL FDP on Full Stack AI Web Development

**Day1 Session–20<sup>th</sup>Jan 2025:** Day1 of the FDP started with the session by Mr. Kiran M, Mr. Pavan Kumar E and Team. The session was delivered on "**Creation of virtual environment, Django project and App".**
**Key Points:**
● Default Python Execution: Single-threaded and single-process.
● Explicit Concurrency: Use threading, multiprocessing, or asyncio to introduce multithreading, multiprocessing, or asynchronous behavior.
● Global Interpreter Lock (GIL): For multithreading, the GIL restricts concurrent execution of threads for CPU-bound tasks, making multiprocessing a better choice in such scenarios.
**Hands on Session:**
1. Creation of Virtual Environment
2. Simple CRUD Operation Application
3. Authentication Django App
4. REST FULL API CRUD Operation with openai API

**Day2 Session-21<sup>st</sup> Jan 2025:** Day 2 session was delivered by Mr. Nikhil Jain C S Mr Kiran M and Team on "**Developing a Django app with displays"** with hands on session. The session was concluded on the following:
1. Stateless Communication: Each request from the client contains all the necessary information, and the server does not store client-specific information between requests.
2. Resource-Based: RESTful APIs expose resources (e.g., users, books, orders) via endpoints like /api/books/.
3. HTTP Methods: Uses HTTP methods (GET, POST, etc.) to perform operations on resources.
4. Uniform Interface: Simplifies communication between client and server by standardizing how resources are accessed.
5. Scalability: Stateless communication allows the server to handle multiple requests efficiently.

**Day3 Session-22<sup>nd</sup> Jan 2025:** Day 3 session was delivered by Mr. Satisha V, Mr. Kiran M and Team on "**Inherit the layout.html and creation of additional pages"** with hands on session. The session was concluded on the following:
1. Create a To-Do App in React:
   Features: Add, delete, and mark tasks as completed.
2. Create a Student Management App in Angular:
   Features: Add, edit, and delete student records.

**Day4 Session-23<sup>rd</sup> Jan 2025:** Day 4 session was delivered by Mr. Koushik M S and Team on "**Developing the Django app by integrating AI into applications"** with hands on session. The session was concluded on the following:
1. Creating a Django Project
2. Development Environment Setup
3. Install Python and Pylance extension in VS Code
4. Open Python project in VS Code
5. Launch a local development server to preview and test the website
6. Projects and Applications

**Day5 Session-24<sup>th</sup> Jan 2025:** Day 5 session was an Industrial visit delivered on Area of specialization "**Artificial Intelligence"** and afternoon practice session was on **"Advanced Technologies of Artificial Intelligence".** The session was concluded on the following:
1. Back End Development
2. Database Development
3. Full Stack Development
4. Build with AR/VR
5. Capstone Projects

# ATAL FDP on Full Stack AI Web Development

**Day6 Session-25<sup>th</sup> Jan 2025:** Day 6 session was delivered by Mr. Pavan Kumar E on **"Building intuitive and user-friendly interfaces to enhance the customer satisfaction".** The session was concluded on the following:
1. AI in AR/VR interfaces
2. Emotion AI and adaptive UIs
3. AI-generated UI components
4. Self-learning AI models for personalization
5. AI-driven accessibility enhancements

The Quiz Assessment for participants was conducted between 2.00 PM to 4.00 PM followed by the Valedictory session between 4.00 PM to 5.00 PM. The Chief Guest of the Valedictory function was Dr. Yogesh G S (Vice-Principal, EPCET), Guest of Honour of the function was Prof. Kemparaju N (Professor, EPCET) and the Coordinators Dr. Komala C R & Prof. Teena K B chaired the function. Also, the HODs-EPCET and Faculty Members were present with the participants.

Prof. Rashmi-EPCET addressed the gathering with the welcome speech followed by the feedback session from the participants. The participants from various institutions shared their experience, take away and congratulated the organizing committee. The Chief Guest Dr. Yogesh G S (Vice-Principal, EPCET) addressed the participants and honored the organizing committee & the participants. The Valedictory function was concluded with the "Vote of Thanks" and the group photo session.

**YouTube Live Streaming Link:**

https://www.youtube.com/live/9HKyTQ2Vbyw?feature=shared

## Glimpses/Preview of the FDP Sessions
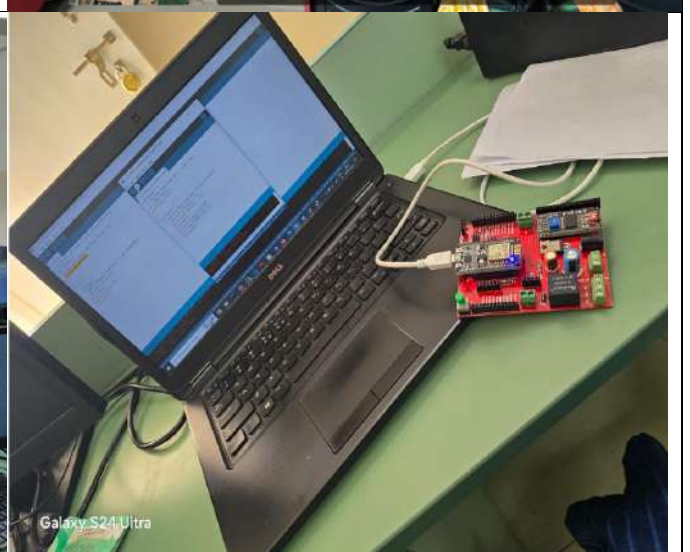
# ATAL FDP on Full Stack AI Web Development

# ATAL FDP on Full Stack AI Web Development

## Sample copies of Certificates

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**ALL INDIA COUNCIL FOR TECHNICAL EDUCATION**

Nelson Mandela Marg, Vasant Kunj, New Delhi -110070

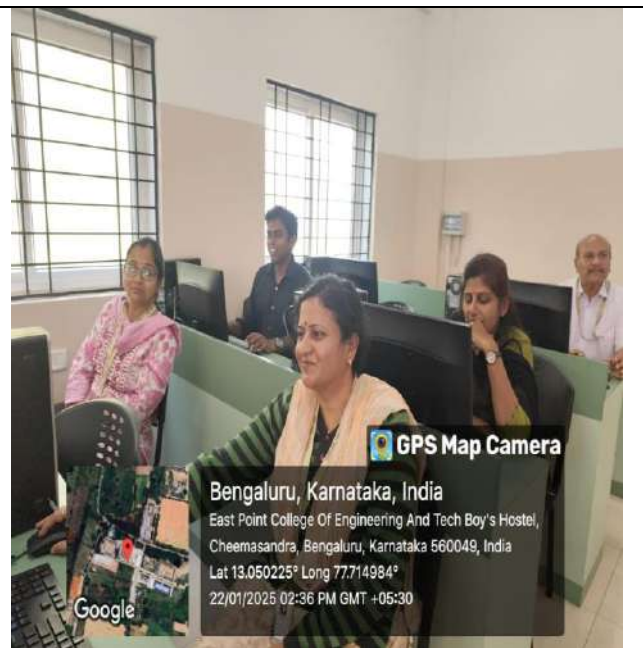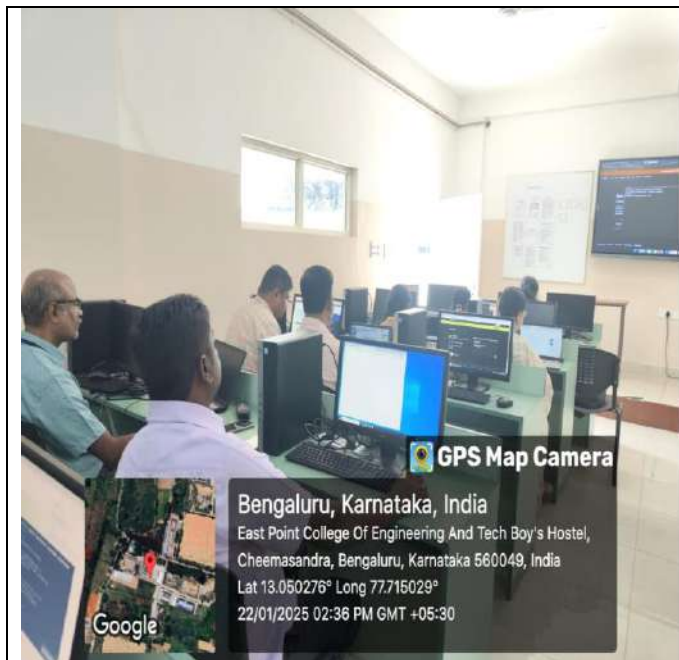AICTE Training and Learning (ATAL) Academy

### Certificate

It is certified that **Dr. Sreenivasa Rao Amaraneni, Professor** of **East Point College of Engineering and Technology** has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on **Full Stack AI Web Development** at **EAST POINT COLLEGE OF ENGINEERING & TECHNOLOGY** from **20/01/2025 to 25/01/2025.**

Dr Komala C R
Professor Level (AICTE Institute), Coordinator
**EAST POINT COLLEGE OF ENGINEERING & TECHNOLOGY**

Dr. Sunil Luthra
Director & Bureau Head
Training and Learning Bureau, AICTE

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ATAL/2024/1735549609

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**ALL INDIA COUNCIL FOR TECHNICAL EDUCATION**

Nelson Mandela Marg, Vasant Kunj, New Delhi -110070

AICTE Training and Learning (ATAL) Academy

### Certificate

It is certified that **Mr. Vijayakumar.D, Assistant Professor(Sr.Grade)** of **National Engineering College, Kovilpatti** has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on **Full Stack AI Web Development** at **EAST POINT COLLEGE OF ENGINEERING & TECHNOLOGY** from **20/01/2025 to 25/01/2025.**

Dr Komala C R
Professor Level (AICTE Institute), Coordinator
**EAST POINT COLLEGE OF ENGINEERING & TECHNOLOGY**

Dr. Sunil Luthra
Director & Bureau Head
Training and Learning Bureau, AICTE

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It was a great initiative by ATAL Academy. I am thankful to AICTE for giving me an opportunity to conduct offline FDP for the faculty members from various technical institutions of India with free registration fees. We received a huge response of registration and good compliments for organizing the offline FDP with hands on sessions.

**Dr. Komala C R**
Professor-EPCET, Coordinator

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

PRINCIPAL
EAST POINT COLLEGE OF
ENGINEERING & TECHNOLOGY
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