

## AIO 2026 Training Calendar

| <b>Computer Vision</b> |  |
|------------------------|--|
| 1                      | Introduction to Computer Vision  |
| 2                      | Deep Neural Networks ANN and Stochastic Gradient Descent                                       |
| 3                      | Image Classification 1: The Convolutional Classifier   |
| 4                      | Image Classification 2: Activation and Pooling   |
|                        | Live Session   |
| 5                      | Data Augmentation  |
| 6                      | Kaggle   |
| 7                      | Introduction to OpenCV   |
| 8                      | Object detection with OpenCV   |
|                        | Live Session   |
| <b>Advanced Topics</b> |  |
| 1                      | Object Detection with YOLO5 part1  |
| 2                      | Object Detection with YOLO5: Roboflow: Data Gathering, Image Preprocessing and Annotation tool |
| 3                      | Object Detection with YOLO5 part3: Application   |

## Embedded systems

|                        |   |
|------------------------|---|
| 1                      | Introduction : embedded systems, electricity basics                       |
| 2                      | Serial and variables: Global and local variables,<br>Serial communication |
| 3                      | Digital output: Digital pins, LED blinking                                |
| 4                      | Digital input: Push button, If statement                                  |
|                        | Live Session  |
| 5                      | Analog output: LED brightness, Motor speed                                |
| 6                      | Analog input: Temperature sensor, Automatic fan                           |
| 7                      | Loops: For loop, Servo motor  |
| 8                      | Wireless communication Bluetooth connection                               |
|                        | Live Session  |
| <b>Advanced Topics</b> |   |
| 1                      | Display: LCD  |
| 2                      | Internet of things: Introduction to ESP 32                                |
| 3                      | Advance wireless communication: WIFI<br>connection                        |
| 4                      | IOT API`s Universities  |

## Coding

|                        |  |
|------------------------|--|
| 1                      | Output function: Print function, Variables         |
| 2                      | Inputs: Input function, Type conversion            |
| 3                      | Operators: Arithmetic operators, Logical operators |
| 4                      | Decision making: If statement, Else statement      |
|                        | Live Session                                       |
| 5                      | Flow control: For loop                             |
| 6                      | Flow control: While loop                           |
| 7                      | Collection data: Lists, Tuples, Sets, Dictionaries |
| 8                      | Functions: Define functions, Call functions        |
|                        | Live Session                                       |
| <b>Advanced Topics</b> |  |
| 1                      | Classes  |
| 2                      | Advanced math functions and Math Module            |
| 3                      | Arrays   |
| 4                      | File Handling                                      |

## Machine Learning

|                        |   |
|------------------------|---|
| 1                      | Introduction to Machine Learning                  |
| 2                      | Supervised Learning: Regression                   |
| 3                      | Supervised Learning: Classification               |
| 4                      | Underfitting and Overfitting                      |
|                        | Live Session                                      |
| 5                      | Preprocessing Data: Cleaning, Encoding, Splitting |
| 6                      | Evaluation Metrics                                |
| 7                      | Practice Project                                  |
| 8                      | Research and Data Gathering                       |
|                        | Live Session                                      |
| <b>Advanced Topics</b> |   |
| 1                      | Unsupervised Learning: Clustering                 |
| 2                      | Pipelines   |
| 3                      | Mutual Information                                |
| 4                      | Feature engineering                               |

## Cybersecurity

|   |                        |
|---|------------------------|
| 1 | Introduction and Linux |
| 2 | Networking             |
| 3 | Web Security           |
| 4 | Digital Forensics      |
|   | Live Session           |
| 5 | Reverse                |
| 6 | Cryptography           |
| 7 | OSINT                  |
|   | Live Session           |

## Advanced Topics

|   |                                       |
|---|---------------------------------------|
| 1 | Introduction and Linux - Universities |
| 2 | Web Security - Universities           |
| 3 | Digital Forensics - Universities      |
| 4 | Reverse - Universities                |
| 5 | Cryptography - Universities           |
| 6 | OSINT-Universities                    |