



ATHARVA EDUCATIONAL TRUST'S
ATHARVA COLLEGE OF ENGINEERING

(Approved by AICTE, Recognized by Government of Maharashtra
& Affiliated to University of Mumbai - Estd. 1999 - 2000)

DEPARTMENT OF ELECTRONICS ENGINEERING

Academic Year 2019-2020

Report on
2 Weeks Short Term Training Program (STTP) on
“Machine Learning & IoT”
25th November - 6th December, 2019

The Department of Electronics Engineering, Atharva college of Engineering, Mumbai has successfully organized AICTE-ISTE approved 2 Weeks Short Term Training Program (STTP) on “Machine Learning & IoT”. The STTP addressed the various aspects of Machine learning & IoT and promoted student centric teaching – learning pedagogy among the participants. This STTP was aimed for teachers who are teaching to various disciplines of engineering and technology subjects in colleges or Universities. There were 32 participants registered for this programme of which 3 external participants and 1 industry expert who have attended and were benefited by this STTP.

This STTP was organized with a view to make the participants aware about various algorithms in ML & DL with the security threats in IoT data in our society today. During the entire STTP session, the participants have learnt software Python, installation of Anaconda for Hands on Python through Jupyter notebook. Various sensors like motion sensors, ultrasonic sensor, distance sensor, IR sensor analysis through Arduino & Raspberry Pi models using Python programming in IoT.

Dr. S. P. Kallurkar, Principal, Atharva College of Engineering, Mumbai had inaugurated the programme. In his inaugural address, Dr. S. P. Kallurkar Sir focused upon the paradigm changes from analog computer technology to modern ICT based teaching and the importance of safely using the online tools, social networking sites and evaluation in present days. Principal sir also focused on the need to deal with the rapid changes and shifting paradigms in the education field. “Without such training, teaching is often reduced to one – way lecturing”, he said.

Dr. Zia Saquib, Senior Vice President of Technology Innovation & Development at Reliance JIO was the Chief Guest for the inaugural function. Dr. Zia Saquib spoke about the importance of using machine learning on IoT data with different case studies like medical, agriculture. **Dr. Bhavin Shah (Convener and Head of ETRX.), Mr. Ranjan Kumar**



ATHARVA EDUCATIONAL TRUST'S
ATHARVA COLLEGE OF ENGINEERING

(Approved by AICTE, Recognized by Government of Maharashtra
& Affiliated to University of Mumbai - Estd. 1999 - 2000)

DEPARTMENT OF ELECTRONICS ENGINEERING
Academic Year 2019-2020

(Speaker), Mr Sanjay Singh (Speaker), Prof. Samuel Jacob, Vice Principal, Technical, Prof. Karuna Nikum, Vice Principal, R&D, Prof. Suvarna Pansambal (HOD CMPN) Prof. Deepali Maste (HOD INFT), also graced the inaugural function.

25th-27th Nov, 2019, Dr Zia Saquib (Key Speaker, Senior VP Technical at Reliance JIO) & his team members explored the participants with various case studies and hands on Python programming.

28th Nov, 2019, Ms. Anita Choudhari, HOD, INFT from St. John College of Engineering, Palghar delivered hands on IoT sensors.

29th Nov, 2019, all STTP participants had an opportunity to have **1 Day Industrial Visit** at **Godrej Security Solutions, Godrej & Boyce Mfg. Co. Ltd., Vikhroli, Navi Mumbai**, where **Mr. Mallikaarjun (key Speaker)** briefed about the different project opportunities running in Godrej and also briefed about innovations going in ML & IoT at Godrej like smart lock, smart cupboards etc.

2nd-3rd Dec, 2019, Dr. Vijay Katkar demonstrated on how to turn ON & OFF the light using controlling web pages using HTML, PHP coding. Sir also conducted sessions on linear regression methods in ML.

3rd Dec, 2019 afternoon we had a short session for **Yoga & Meditation** for relaxing all the participants of the STTP.

4th-6th Dec, 2019, Mr. Santosh Chapaneri conducted theory and hands on sessions through google collab on ML supervised & unsupervised algorithms by using different datasets provided like iris, titanic etc. Sir also delivered session on DL algorithms like Artificial Neural Network(ANN), Convolutional Neural Network (CNN) through datasets and also conducted practical sessions on all the theoretical concepts delivered during the sessions.

6th Dec, 2019, afternoon, the STTP was Concluded & Test was conducted by STTP Organizing Committee based on sessions covered during the 2 Weeks STTP program. After conduction of test, Valedictory function was conducted in the august presence of Dr. Shrikant Kallurkar, Principal (ACE), Mr. Santosh Chapaneri (External Speaker), Dr. Bhavin Shah (STTP Convener & HOD ETRX), Ms. Kavita Bani (STTP Coordinator), STTP Organizing Committee Members, HOD's & VP's were present along with the participants. The participants were delighted to share



ATHARVA EDUCATIONAL TRUST'S
ATHARVA COLLEGE OF ENGINEERING

(Approved by AICTE, Recognized by Government of Maharashtra
& Affiliated to University of Mumbai - Estd. 1999 - 2000)

DEPARTMENT OF ELECTRONICS ENGINEERING

Academic Year 2019-2020

their views & were excited to be a part of the STTP. The STTP was concluded on a positive note & with a big round of applause from the participants with the promise of arranging such STTP's in future too.

STTP Organizing Committee, Department of Electronics Engineering, Atharva College of Engineering, Malad (West), Mumbai-400095 would like to thank Hon. Shri. Sunil Rane sir, Executive President, Atharva Group of Institutes, for giving us an opportunity to organize STTP on Machine Learning & IoT & for always providing such platforms to enhance our technical knowledge and skills.

We would also like to thank Dr. P.N. Nemade, Director of Atharva College of Engineering, for his constant support & motivation, Dr. S.P. Kallurkar Sir, Principal of Atharva College of Engineering, for his valuable guidance & suggestions, Ramprasad sir, Vice Principals, HODs, All teaching & Non-Teaching Staff of Atharva College of Engineering for their kind cooperation.

Our special thanks to AICTE & ISTE for granting us the permission for organising such a wonderful STTP.

On the behalf of Organizing Committee, we sincerely promise you that in the coming years too we will keep on organizing such STTP's related to the field with some more innovative ideas.

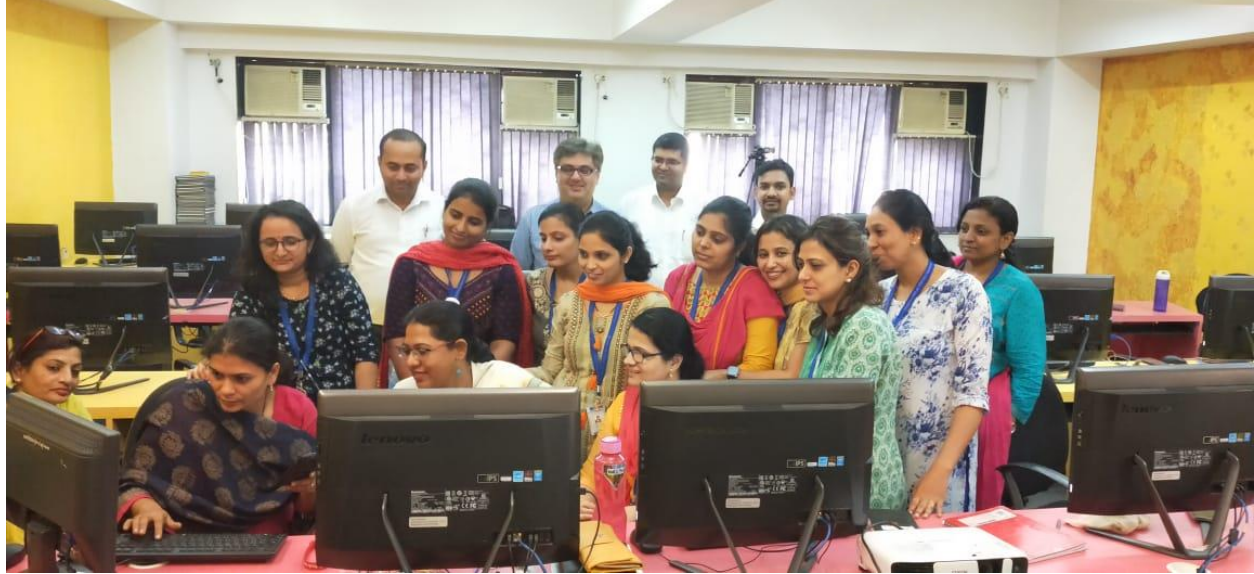
Attached below are the Glimpse of 2 Weeks STTP on Machine Learning & IoT conducted from 25th November, 2019 to 06th December, 2019



ATHARVA EDUCATIONAL TRUST'S ATHARVA COLLEGE OF ENGINEERING

(Approved by AICTE, Recognized by Government of Maharashtra
& Affiliated to University of Mumbai - Estd. 1999 - 2000)

DEPARTMENT OF ELECTRONICS ENGINEERING
Academic Year 2019-2020





ATHARVA EDUCATIONAL TRUST'S ATHARVA COLLEGE OF ENGINEERING

(Approved by AICTE, Recognized by Government of Maharashtra
& Affiliated to University of Mumbai - Estd. 1999 - 2000)

DEPARTMENT OF ELECTRONICS ENGINEERING
Academic Year 2019-2020





ATHARVA EDUCATIONAL TRUST'S ATHARVA COLLEGE OF ENGINEERING

(Approved by AICTE, Recognized by Government of Maharashtra
& Affiliated to University of Mumbai - Estd. 1999 - 2000)

DEPARTMENT OF ELECTRONICS ENGINEERING
Academic Year 2019-2020





ATHARVA EDUCATIONAL TRUST'S
ATHARVA COLLEGE OF ENGINEERING

(Approved by AICTE, Recognized by Government of Maharashtra
& Affiliated to University of Mumbai - Estd. 1999 - 2000)

DEPARTMENT OF ELECTRONICS ENGINEERING
Academic Year 2019-2020





ATHARVA EDUCATIONAL TRUST'S
ATHARVA COLLEGE OF ENGINEERING

(Approved by AICTE, Recognized by Government of Maharashtra
& Affiliated to University of Mumbai - Estd. 1999 - 2000)

DEPARTMENT OF ELECTRONICS ENGINEERING
Academic Year 2019-2020





ATHARVA EDUCATIONAL TRUST'S
ATHARVA COLLEGE OF ENGINEERING

(Approved by AICTE, Recognized by Government of Maharashtra
& Affiliated to University of Mumbai - Estd. 1999 - 2000)

DEPARTMENT OF ELECTRONICS ENGINEERING
Academic Year 2019-2020





ATHARVA EDUCATIONAL TRUST'S ATHARVA COLLEGE OF ENGINEERING

(Approved by AICTE, Recognized by Government of Maharashtra
& Affiliated to University of Mumbai - Estd. 1999 - 2000)

DEPARTMENT OF ELECTRONICS ENGINEERING
Academic Year 2019-2020

