



Overview

- Review of 2020 activities
- Lessons learnt
- 2021 Activities



2020 Activity

5G technologies for IoT

- Information
 - Dates: 28-29 September
 - Mode: online
 - Language: English
 - Cost: 200 USD
- 4 participants, from Mozambique, USA and Saudi Arabia
- All participants have successfully completed the quizzes
- We had lecturers from the private sector (Huawei) and this has enriched the training

2020 Activity

Applications of Satellite Based IoT Networks

- Information
 - Dates: 16-17 November
 - Mode: online
 - Language: English
 - Cost: 150 USD

In this capacity building activity we will cover technologies of GEO (geostationary) satellites in C-, Ku- and Ka-band, new LEO (low earth orbit) or HEO (highly elliptical orbit) constellations, as well as the new developments in nanosatellites.

As controlling the cost per device is of essence for the success of IoT applications, we will cover the sustainability issue of satellite-based IoT applications.

Data Science: technical & business aspects for open innovation

- **Report summary**
 - Dates: 10-12 August
 - Mode: Face to Face then switched to e-learning
 - Language: English
 - Cost: 150USD
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- Switched to e-learning course.
- Currently awaiting upload of materials .
- To be offered as full e-learning course also in 2021.
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Trends and advances in Data Science, Machine Learning and Artificial Neural Networks

- **Report Summary**
 - Dates: 13-14 August
 - Mode: Face to Face then switched to e-learning
 - Language: English
 - Cost: 150USD
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- **Overview**
 - Switched to e-learning course.
 - Currently awaiting upload of materials .
 - To be offered as full e-learning course also in 2021.

Lessons learnt

- Training strategy
 - Include private sector lecturers
 - Useful to get real-world examples and direct experience
- Recommendations
 - Marketing within Europe:
 - Improving early targeted distribution of announcements via ITU Academy to professionals and corporate entities.
- Other Region activity
 - Challenges
 - Reaching direct agreements between CoE.
 - Differences in approaches to costing and payment.



The Abdus Salam
International Centre
for Theoretical Physics



2021 ACTIVITIES

2021 Activity

Application of Satellites for IoT

- Information
 - Dates: ?? September, 2 days
 - Mode: online
 - Language: English and Spanish
 - Cost: 100 USD

In this training activity we will cover IoT applications that can provide coverage even in areas of inexistent land infrastructure or in the oceans. Newer developments in GEO (geostationary), MEO (medium earth orbit) and LEO (low earth orbit) solutions will open innovative solutions.

As controlling the cost per device is of essence for the success of IoT applications, we will cover the sustainability issue of satellite-based IoT applications.

2021 Activity

5G technologies for IoT

- Information

- Dates: ?? November, 3 days
- Mode: online
- Language: English
- Cost: 100 USD

The rapidly evolving field of IoT requires trained professionals capable of analyzing the best solutions for a given application.

Experts from both the academia and the industry will provide the participants with the required tools to accomplish this task in a timely manner.

Both proprietary and standard based solutions will be analyzed, presenting their respective advantages and limitations.

2021 Activity

Data Privacy, Security & Governance

- Information

- Dates: ?? October, 3 days
- Mode: online
- Language: English
- Cost: 100 USD

From self driving vehicles to smart platforms and cities data driven applications is a growing part of everyday life. This activity examines the key areas of privacy, security and governance in relation to artificial intelligence systems and maintaining human rights and the SDG goals.

2021 Activity

Speech and Natural Language Processing

- Information

- Dates: ?? August, 3 days
- Mode: online
- Language: English
- Cost: 100 USD

Voice enabled smart devices are now widely available . In many cases, they are driven by cloud based Machine Learning and Neural Network platforms systems that have been trained using massive amounts of data. This activity introduces the fundamentals of Natural Language Processing, Recurrent Neural Networks and the Data Science techniques that are useful for processing non-English Speech and Natural Language Processing.