

Welcome to the Hackathon!

DAY1 - Kickoff session

Speakers

Dario Sabella (INTEL), Francesco Brocero (Synesthesia)

25-26 November 2020 (online event)

Droidcon MEC Hackathon 2020

endorsed by ETSI

<https://www.etsi.org/events/1694-2020-04-droidcon-mec-hackathon>

<https://it.droidcon.com/2020/hackathon/>

Welcome to all the MEC developers!

Congratulations!!

You are one of the Teams selected for this **MEC Hackathon!!**

The Hackathon Organizing Committee



Supported by



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EDGE
COMPUTING WORLD
October 12th-15th 2020 //

under the Patronage of



MEC Hackathon 2020: the technical challenge

2020 edition is fully REMOTE!!
Developers can register also for a Droidcon MEC Hackathon **remote participation!**

MEC (Multi-access Edge Computing) can serve many key 5G use cases.

Most of them are related to application scenarios specifically targeted to vertical markets of the 5G era.

The purpose of this Hackathon is to demonstrate the usage of MEC system as an enabler for different use cases and business objectives, helping all stakeholders to develop a diverse, open MEC ecosystem.

Examples of MEC-enabled vertical segments applications include (but are not limited to) the following big categories of use cases (here called blueprints):

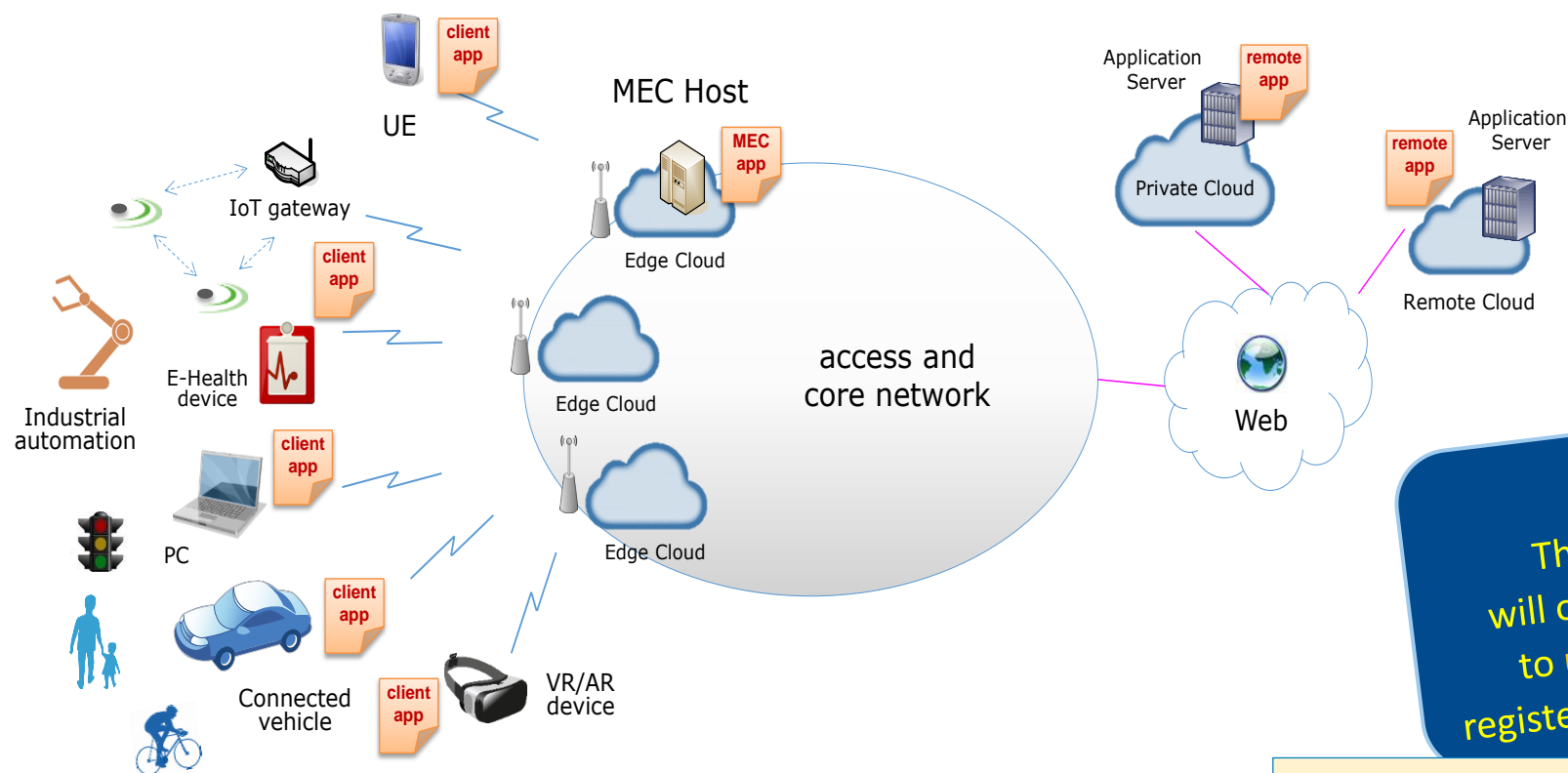
- automotive
- factories of the future
- drones
- consumer, media and entertainment



Note: the Organizing Committee decided to admit to this Hackathon Teams working on all these different topics

MEC Hackathon 2020: the technical challenge

- Developers' teams at the Hackathon will be tasked to develop Android applications for services in MEC-enabled 5G networks, running on OpenNESS platform and using ETSI MEC technologies.



NEWS:

The organizing committee will offer remote servers' access to up to 2 last-minute Teams registering for remote participation!

For further information, you can contact us at info@droidcon.it

The Jury of this MEC Hackathon 2020



Dario Sabella



Intel,
ETSI MEC
vice-Chair



Alessandro
Breccia



Customer
Solution
Architect



Andrea Laganà



Senior Project
Manager



Maurizio
Florida



Researcher



Guido Coenders



EQUINIX

Director, Global
Solution
Architecture



Michele
Carignani



ETSI CTI,
Technical Expert



Tom Van Pelt



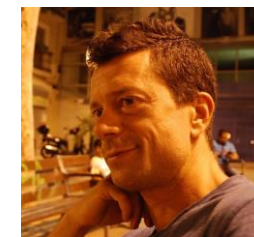
GSMA,
Future
Networks



Nicola
Farronato



Turin City,
Innovation
Team



Francesco
Brocero



Director
Events and
Training

The whole HOC members:

Dario Sabella, Xavier Simonart, Purvi Thakkar, Sujata Tibrewala, Anish Rawat, Alessandro Breccia, Mirko Berlier, Andrea Laganà, Roberto Procopio, Maurizio Florida, Edoardo Bonetto, Daniele Brevi, Riccardo Scopigno, Guido Coenders, Jacob Smith, Michele Carignani, Tom Van Pelt, Faisal Zia, Nicola Farronato, Francesco Brocero.

MEC Hackathon: The prizes

At the end of the competition there will be an **award ceremony**, where the Organizing Committee have organized a number of **prizes**:

- ✔ The venue host **Synesthesia** will provide the winners free passes for a future Droidcon conference (2021).
- ✔ Synesthesia will also present a customized **Hackathon Winners trophy** to proudly display in their office.
- ✔ The developers from the winner team will be eligible to be part of **Intel Software Innovator program** (<https://software.intel.com/en-us/intel-software-innovators>) and their project will be eligible to be featured as an Intel Early Innovation Project. This means that the project will be eligible for stipend to produce/present a tutorial/paper on their project, hardware funds for their project, and other start up mentorship program.
- ✔ **Special prizes** will be offered by the organizing committee in correspondence to particular achievements of the developers teams, for some of the following (optional) challenges: usage of OpenVINO toolkit, or DPC++ framework.
- ✔ The winners will be offered the possibility to participate to the **Smart Road project** (a consortium of partners, from car makers, network operators, universities and the City of Turin), with the aim of proposing their developed solution as possible implementation for testing activities in the urban environment of Turin.

More details are coming...

... Stay tuned!!

Droidcon MEC Hackathon 2020: The schedule

25 November (Day 1)

Detailed programme for Day1 - morning:

10:30	Registration, Welcome and presentation by the host, Francesco Brocero (Synesthesia)	
10:45	Guidelines for the MEC Hackathon. Dario Sabella (Intel)	
	Track 1 – Technical MEC tutorials and masterclass WEBEX EVENT with chat and Q&A https://cisco.webex.com/cisco/join/jtID=eddc29ca0b0d3bd69824b9708af55b8ac <small>Event password: HMr6pMxT45</small>	Track 2 - MEC Hackathon WEBEX Teams for the developers and the HOC. (Link provided to Hackathon participants)
11:00	ETSI MEC Architecture and APIs (Michele Carignani, ETSI CTI) This presentation will provide a high-level overview of the MEC standard, including the ETSI activities on OpenAPI representations (published at https://forge.etsi.org/), as a useful reference for both developers at the Hackathon and also all attendees at the event.	Developers teams can start their implementation work, getting support from local people belonging to the Organizing Committee.
11:30	Overview of the MEC Hackathon setup for application developers (Anish Rawat, Xavier Simonart, Intel) This tutorial is providing an overview of the overall setup offered to Hackathon participants, with MEC servers available and remotely accessible from developers. Registered users will be able to try the OpenNESS and understand how to develop MEC applications.	Dedicated Wifi network will be deployed for the MEC Hackathon application developments. CISCO will provide also a chat (WEBEX Teams) for information sharing.
12:30	Lunch Break	

Detailed programme for Day1 - afternoon:

14:00	<u>Deepdive on OpenNESS (Archit Agarwal, Wipro, Xavier Simonart, Intel) – online tutorial</u> The platform enables easy data ingestion on the MEC by abstracting underlying network complexity with open APIs. It has <u>features</u> such support for Cloud Connectors (e.g. AWS Greengrass), and container and VM-based orchestration of the MEC platform.	MEC Hackathon: Continuation of the application development. Preparation of use cases, mobile apps and related presentation (developers will be given a brochure with all information needed). Intermediate Delivery: by 17.00 (exceptional deadline extension is subjected to a decision of the Hackathon Organizing Committee)
15:00	Hands-on session with <u>oneAPI</u> (Adonay Berhe and Benjamin J Odom, Intel) Registered users will be able to try the <u>oneAPI</u> and understand how to use it as support to develop workload accelerations for their MEC applications.	
16:00	Developers, startups and edge innovators ecosystem in the 5G era (Martin Olczyk, Techstars) – F2F/online keynote Inspirational presentation related to business aspects for innovators. Insights/considerations on market status, with opportunities and challenges for startups and developers.	
16:30	Coffee Break	
17:00		Elevator pitch from Developers Teams (only for Jury Members) (intermediate delivery and presentation of the project idea from each Team) ONE SPEAKER per TEAM <i>(Max 3 mins each)</i>
18:00	end of Day1	

Note: The entire WEBEX event (Track 1) will be in live streaming, for both Day 1 and Day 2. After the event, the organizing committee will publish a link for offline watching.

Droidcon MEC Hackathon 2020: The schedule

✓ 26 November (**Day 2**)

Detailed programme for Day2 - morning:

10:30	Welcome from the host, Francesco Brocero (Synesthesia)	
	Track 1 – Technical MEC tutorials and keynotes WEBEX EVENT with chat and Q&A https://cisco.webex.com/cisco/onstage/g.php?MTID=e76ad89a1d9e375651fcb761a3944fc6 Event password: BKUVbM5nj62	Track 2 – MEC Hackathon WEBEX Teams for the developers and the HOC. (Link provided to Hackathon participants)
10:45	Edge computing view (Alessandro Breccia, CISCO) – F2F keynote Overview of edge computing infrastructure, use cases and monetization	
11:15	ETSI MEC Location API (Maurizio Florida, LINKS) – F2F/online tutorial This technical presentation will provide an overview of the MEC Location API developed by LINKS and offered to developers. The simulation environment and also the integration with OpenNESS will allow developers to use these functionalities for their edge applications.	
11:45	MEC federation: standards overview (Masaki Suzuki, KDDI) – online/F2F keynote This presentation will provide a technical overview of standardization activities in ETSI MEC on Inter-MEC system communication, in alignment with the work in 5GAA on automotive use cases and in GSMA OPG on the MEC federation.	

Detailed programme for Day2 - afternoon:

	Track 1 – Keynotes and ecosystem panel	Track 2 – MEC Hackathon
14:00	Edge Cloud and innovation on automotive: the Smart Road project in Torino City Lab (Nicola Farronato, City of Turin) – F2F keynote <i>The speaker will present the Smart Road project: a consortium of partners, from car makers, network operators, universities and the City of Turin, with the aim of develop, implement and test advanced solutions in the urban environment of Turin.</i>	MEC Hackathon: Continuation of the application development. Preparation of use cases, mobile apps and finalization of the presentation (videoclip) Final Delivery: by 17.00 (exceptional deadline extension is subjected to a decision of the Hackathon Organizing Committee)
14:30	Edge Computing Implementation – The Telco Viewpoint (Andrea Laganà, TIM) – F2F keynote Presentation of the point of view of the mobile operator on edge computing, with special focus on implementation aspects.	
15:00	Operator Platform (Faisal Zia, GSMA) – F2F keynote This presentation will provide an overview of the Operator Platform Group in GSMA, defining the requirements for the definition of a edge federation infrastructure.	
15:30	MEC4AUTO: edge computing for automotive (Leonardo Gomes, 5GAA WG1 Vice Chair) – online keynote This presentation will provide a technical overview of the activities in 5GAA related to the MEC4AUTO work item.	
16:00	Telco Edge Cloud task force (Juan Carlos Garcia Lopez, Telefonica) – F2F keynote This presentation will provide an overview of the Telco Edge TF, including the trials deployed with many operators and partners. The speech will also explain how these initiatives are important for edge application developers in the ecosystem.	
16:30	MEC federation solutions (Himanshu Singh, Altran) – F2F keynote This presentation will provide an overview of the technical solution to implement a MEC federation in a multi-MNO environment.	
17:00	Panel Discussion, Business opportunities offered by Edge Cloud for the automotive and other industry segments. Panel moderated by Dario Sabella (Intel) Confirmed Panelists: <ul style="list-style-type: none"> Nicola Farronato, City of Turin Riccardo Scopigno, Links Foundation Juan Carlos Garcia Lopez, Telefonica Farid Singh, Tech3innovate Faisal Zia, Future Networks, GSMA Leonardo Gomes, Intel, 5GAA WG1 Vice Chair Shamik Mishra, Altran, OPG Dy. Chair Moderator: Dario Sabella	
18:00	Wrap-Up & Closing by the moderator, Dario Sabella (Intel) and event host Francesco Brocero (Synesthesia)	



Keynotes and final panel discussion in Track#1

MEC Hackathon: Developer Team **delivery** guidelines

✓ **Intermediate** delivery

- ✓ by 25th November at 5PM CET → ELEVATOR PITCH to the HOC !! (see below)
- ✓ Please use the DOC template form that will be provided by the HOC
- ✓ Add all material you can, in support of your intermediate delivery
- ✓ Use the WEBEX area to upload your material (e.g. PPT, videoclip, other demo docs...)

✓ Live presentation: “elevator pitch on stage”

- ✓ 25/11 on WEBEX Track 2 (only for the HOC)
- ✓ Speech supported with your choice of material (e.g. PPT, videoclip, etc..)

✓ **Final** delivery

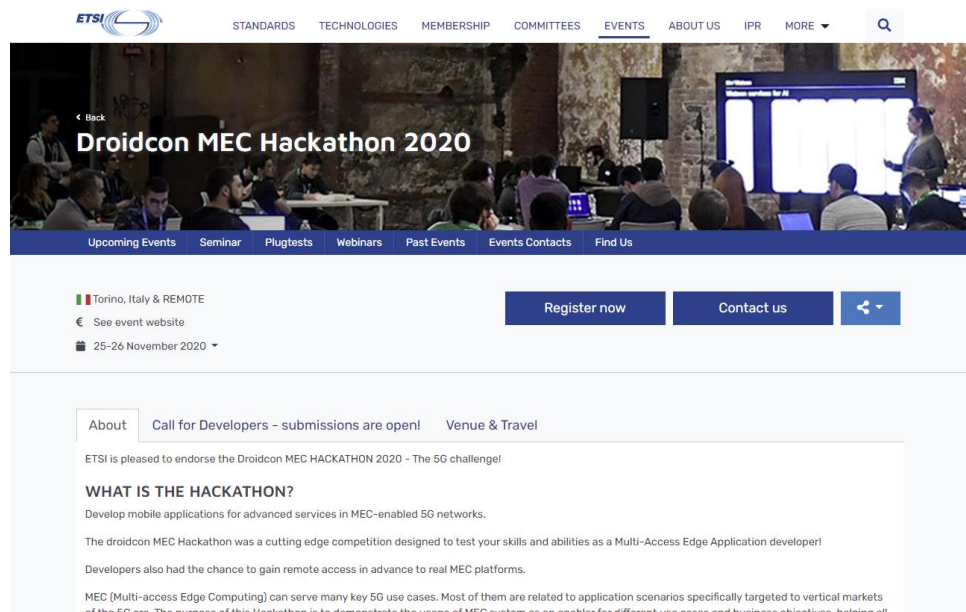
- ✓ by 26th November at 5PM CET → for the final Jury evaluation
- ✓ Again, use the WEBEX area to upload your material
- ✓ It should consist of a PPT slide set, plus an optional videoclip (**2 mins** max)

Questions?

✓ The jury members are assisting you during all the competition.



Further questions, don't hesitate to ask!



The screenshot shows the ETSI website for the Droidcon MEC Hackathon 2020. The header includes the ETSI logo and navigation links: STANDARDS, TECHNOLOGIES, MEMBERSHIP, COMMITTEES, EVENTS, ABOUT US, IPR, and MORE. The main banner features a photo of the event and the title "Droidcon MEC Hackathon 2020". Below the banner, there are buttons for "Upcoming Events", "Seminar", "Plugtests", "Webinars", "Past Events", "Events Contacts", and "Find Us". A section below the banner provides details about the event: "Torino, Italy & REMOTE", "See event website", and "25-26 November 2020". There are also buttons for "Register now" and "Contact us". The bottom section includes tabs for "About", "Call for Developers - submissions are open!", and "Venue & Travel". The "About" tab is selected, showing text about the hackathon: "ETSI is pleased to endorse the Droidcon MEC HACKATHON 2020 - The 5G challenge!", "WHAT IS THE HACKATHON?", "Develop mobile applications for advanced services in MEC-enabled 5G networks.", "The droidcon MEC Hackathon was a cutting edge competition designed to test your skills and abilities as a Multi-Access Edge Application developer!", "Developers also had the chance to gain remote access in advance to real MEC platforms.", and "MEC (Multi-access Edge Computing) can serve many key 5G use cases. Most of them are related to application scenarios specifically targeted to vertical markets of the 5G era. The purpose of this Hackathon is to demonstrate the usage of MEC system as an enabler for different use cases and business objectives, helping all".

And now it's the time to ...

... Start the MEC Hackathon!!



Enjoy the coding!

... and follow the Tutorials in live streaming 😊
(Track#1 in the agenda)

The Hackathon Organizing Committee



Thank you!



NEWS:

The organizing committee will offer remote servers' access to **up to 2 last-minute Teams** registering for **remote participation!**

For further information, you can contact us at info@droidcon.it