



IoT Forum

Symposium on IoT (SIoT) and Latin America and Brazilian Congress on IoT (LABCIoT)
Hybrid Event

SIoT and LABCIoT will be held as a hybrid event. Participants may choose to present their papers, talks or panel in person or virtually. Presenters must inform their choice of presentation after their papers/talks have been accepted.

Welcome

The LABCIoT is a conference that started in 2016 by the Brazilian Forum on IoT (FBIoT), composed mainly of keynote and invited talks and panel sessions. This year, a scientific symposium is added to the conference, including call for submission for R&D; paper presentations, called International Symposium on IoT (SIoT). For this reason, different scientific societies were invited to join forces to make it a great and attractive event, covering the broad and multidisciplinary field of IoT. Scientific and industrial sessions will be integrated in the same event to promote broader interactions of these communities.

The event will happen from Oct 24th until 28th 2022 in São Paulo at the International Diffusion Center of the University of São Paulo. São Paulo is the largest city in South America and is capital of the State of São Paulo, which has the largest industrial park and scientific research teams in the country. São Paulo is also a cultural center in the country and is not far from a very green and beautiful coast.

Be very welcome to the Symposium and Conference and take the opportunity to enjoy the region.

Important Dates - SIoT

- Paper submission: ~~August 1st, 2022~~ | August 15th, 2022
- Acceptance notification: ~~September 12th, 2022~~ | September 22nd, 2022
- Camera-Ready deadline: ~~October 1st, 2022~~ | October 10th, 2022.

Session Programa ELEVATE da Inmarsat	
18h00	Início, coquetel
19h00	Introdução ao ELEVATE Simon Hawkins, Vice-presidente Comercial e de Inovação, Inmarsat
19h20	IoT na América Latina Ronaldo Lemos, Especialista em tecnologia
20h00	Recepção de redes e bebidas
22h00	Encerramento
Local: Centro Brasileiro Britânico (CBB), Pinheiros, São Paulo	
Link para inscrição: https://www2.inmarsat.com/321511/2022-08-04/7whjnj?utm_source=Email+marketing&utm_campaign=EBU_FY22_IoT_ELEVATE+DRINK+RECEPTION_LATAM	

7th Latin American and Brazilian Congress on IoT - October 24th to 28th, 2022 - Hybrid

26 outubro			
Horário	MÓDULO	CONVIDADOS	COORDENADOR
14:00 - 15:00	Panorama Internacional - Keynote Speech	Mirko Presser - Aarhus University	Gabriel Marão
	Coffee Break		
15:20 - 16:20	Educação no mundo IoT	Arthur João Catto Cláudio Luis Vieira Oliveira - FATEC Jundiaí Ana Cristina dos Santos - Inteli Roseli de Deus Lopes - LSI USP	Antonio César Galhardi
16:20 - 17:20	Não haverá metaverso sem IoT	- Sobre o tema Metaverso - João Roberto Peres - Komp Security Brasil - Governança, Privacidade e Proteção de dados nos Metaversos - Afonso Ferreira - CNRS - IRIT (França) - Bioética nos Metaversos - Ailton Barcelos-Fernandes - Ex-Ministro brasileiro - Uma visão panorâmica sobre IoT x Metaversos - Thelma Troise - Comunidade Tudo sobre IoT	João Roberto Peres
17:20 - 18:00	IoT Student Contest	- MESU – Sistema de monitoramento de Alagamentos - Maria Clara Alves Acruchi - UFPE e Rebecca Lima Sousa - UFPE - Sigabem – apoio ao embarque - Bruno Antônio Bione da Silva - IFPE e Mizael Claudino Lins Silva - IFPE	Arthur Liraneto Torres Costa
18:00 - 22:00	Programa ELEVATE da Inmarsat	Local: Centro Brasileiro Britânico (CBB), Pinheiros, São Paulo	

27 outubro			
Horário	MÓDULO	CONVIDADOS	COORDENADOR
9:00 - 9:50	IoT na Cidade do Futuro - Keynote Speech	Eduardo Moreira da Costa Debatedores: Carlos Passos, Robson Arantes	Hélio Graciosa
	Coffee Break		
10:00 - 10:50	DOA - Digital Object Architecture - Keynote Speech	Sam Sun Xun	Gabriel Marão
10:50 - 11:10	SAT: O maior case de IoT para governo	SAT - O que é? - Vidal Zapparoli Melo - ITS	Vidal Zapparoli Melo
11:10 - 11:30		SAT Fiscal - Claudenir Andrade - Elgin	
11:30 - 11:50		Boletim Boi Gordo - Alinne Lopomo Beteto - GAESI-POLI/USP e Maria Gabriela de Oliveira Tonini - ABIEC	
11:50 - 12:05		Futuro: blockchain/DOA? - Vidal Zapparoli Melo - ITS	
12:05 - 12:30		Debates	
	Lunch		
14:00 - 14:50	Aplicações de IoT na Saúde	Douglas Ribeiro - Philo Care Caroline Andrezi - J&J Medtech Ten. Marcelo Marcon - Hospital Militar de Área São Paulo	Fernando Paiva
14:50 - 15:50	Aplicações na Indústria e em Serviços	José Carlos Franceli - UFABC José Borges Frias Júnior - Siemens	Sérgio Sevilleanu
	Coffee Break		
16:00 - 17:00	Aplicações de IoT no Agronegócio	Wander José Pallone Filho - CooperCitrus Armando Barbieri - TRÓPICO Guilherme Sousa - AgroBee Camilo Carromeu - EMBRAPA	Fabício Lira Figueiredo
17:00 - 18:00	Negócios de IoT em Grandes Operadoras	Paulo Humberto Gouvea - TIM Eduardo Polidoro de Souza - Claro Leandro Rebouças - Telefonica Brasil Márcia Ogawa Matsubayashi - Deloitte	Paulo Portocarrero

28 outubro			
Horário	MÓDULO	CONVIDADOS	COORDENADOR
9:00 - 10:05	Segurança cibernética em IoT - A	Pesquisa sobre panorama de IoT no Brasil Michele Nogueira - UFMG Bruno Guerreiro - Tempest Julio Della Flora - Locaweb	Ramiro Pozzani
10:05 - 10:35		Desenvolvimento seguro Igor Felipe Sodré Ribeiro Carneiro - SiDi	
	Coffee Break		
10:55 - 11:25	Segurança cibernética em IoT - B	Security by Design / Shift Left Luana Favetta Groppo - Sympla Henrique Arakaki Fonseca - SiDi Almir Meira Alves - CECYber	Ramiro Pozzani
11:25 - 12:00	Panorama de regulamentações de segurança em IoT na Europa - Keynote Speech	Afonso Ferreira - CNRS - IRIT (França)	
	Lunch		
14:00 - 15:00	Redes Privativas e IoT	Leandro Galante - NEC Marcela Rocha De Oliveira - Siemens Diego Turi Oliveira - Itaú	André Eletério
	Coffee Break		
15:20 - 16:20	Novas Tecnologias de Redes	Fabiano Sabatini - INTEL Marcos Biazotto - TRÓPICO	Michelle Facina
16:20 - 17:20	Inteligência Artificial em Casos Reais de IoT – Cognitive Edge in Real Cases in Progress	Marcio Kanamaru - KPMG Edilson de Oliveira Júnior - CET SP Laisa B. Costa - LSI/TEX e ITEX	Herberto Macoto Yamamuro
17:20 - 18:00	Encerramento	Diretoria Fórum Brasileiro IoT, SBMicro, Jacobus Swart, Cecilia Castro Cesar, ...	

Symposium on IoT - October 24th to 28th, 2022 - Hybrid

Invited	Payam Barnaghi (Imperial College)	Remote Monitoring Technologies for Healthcare Applications
	Pedro Malo (Uninova de Lisboa)	Digital Innovation Hubs and Collaborative Platform for Cyber-Physical Systems
	Ricardo Reis (UFRGS)	Circuits and Systems Design Strategies for IoT
	Antonio Alfredo F. Loureiro (UFMG)	Challenges and Issues for IoT Security based on AI/ML/DL

Session 1 - IoT in Health

ID	Title	Authors
ID – 12	A Low-cost IoT Mobile System for Monitoring Vital Signs of Elderly People	Angela Matsuo, Bianca Guterres, Nathalia Colares, Otavio Pessoa, Adriano Santos, Daniel Luiz, Celso Barbosa Carvalho, Waldir Silva Júnior
ID – 24	IoT Medical Device Architecture to Estimate Non-Invasive Arterial Blood Pressure	Ramon Moreno, Felipe Dias, Marcelo Arruda, Filipe Oliveira, Thiago Bulhoes, José Krieger, Marco Gutierrez
ID – 26	Use of smart thermostat data to investigate harmful exposure to heat in Calgary, Canada	Julia Perassolli De Lazari

Session 2 - IoT Communications

ID	Title	Authors
ID – 8	LSTM-ACB-Based RA for IoT Mixed Traffic	Herman Lucas Santos, José Carlos Marinello, Cristiano Magalhães Panazio, Taufik Abrão
ID – 18	Crowded MTC Random Access in NOMA XL-MIMO	Thiago Augusto Bruza Alves, Taufik Abrão
ID – 19	Design of a Gateway-based relay node for LoRaWAN multihop networks	Jeferson Rodrigues Cotrim, João Henrique Kleinschmidt, Cintia Borges Margi
ID – 20	RIS-aided System Channel Estimation using NN	David William Marques Guerra, Taufik Abrão
ID – 22	Critical analysis of ITU-R P.1812 and Egli propagation models for LoRaWAN Networks	Bryan da Silva Duarte, Maurício H. C. Dias

Session 3 - IoT in Farming

ID	Title	Authors
ID – 29	Monitoring the Daily Rhythm of Total Green Leaf Volatiles with a Low-Cost Multi-Sensor Node	Filipe Lobo Cardoso, Stefan Blawid
ID – 36	BeeSmart: a real-time remote monitoring and control system for beekeeping	Juan Navarro, Fabio Lima, Martin Porto, Pablo Cracco, Leonardo Steinfeld
ID – 38	Development of a Blockchain and IoT-based Platform for Animal Surveillance	Thiago de Almeida Correia, João Henrique Kleinschmidt
ID – 41	The effectiveness of IoT and machine learning in Precision Agriculture	Rodrigo Filev Maia, Brenno Tondato de Faria, Gustavo Magalhaes Tercete

Session 4 – Enabling Technologies

ID	Title	Authors
ID – 25	An Automated Workflow for Generation of Neural Networks for Embedded FPGAs on IoT	Thomas Araujo Moyal, Marcelo Knörich Zuffo
ID – 40	Neuromorphic Hardware Applied in the Development of Low-Power IoTs	Ingrid T. do Nascimento, Marcelle C. Xavier, Edison C. F. Nogueira, Fernanda Duarte V. R. de Oliveira, Jose Gabriel R. C. Gomes, Genildo N. Santo
ID – 37	Ensuring applications' traffic isolation using IEEE 802.15.4e TSCH through SDWSN slicing	Tarek Sayjari, Regina Melo Silveira, Cintia Borges Margi

Session 5 – IoT Architecture and Platforms

ID	Title	Authors
ID – 35	Reconfigurable Intelligent Surfaces to Enable Energy-Efficient IoT Networks	João Henrique Inacio de Souza, José Carlos Marinello Filho, Taufik Abrão, Cristiano Panazio
ID – 30	JSGuide: A Tool to Improve JavaScript Algorithms Focusing on IoT Devices	Fernando Luis Oliveira, Julio Carlos Balzano Mattos
ID – 42	IoT-Based Sounding Rocket Telemetry System	Rodrigo Andrade, Alison Moraes, Felipe Motta
ID – 32	Evaluation of an IoT-based Smart Charging Algorithm for Electric Vehicles Considering Multiprocessing	Lucas Zenichi Terada, Juan Camilo López, Cindy Paola Guzmán, Marcos Julio Rider, Luiz Carlos Pereira Silva

Session 6 – Smart Cities/Smart Home

ID	Title	Authors
ID – 17	Public Transportation Passengers Accounting at University by IoT Device	Daniel Filipe Vieira, Hildo Guillard Junior
ID – 27	Optimizing Garbage Collection System	Mateus Rodrigues de Barros, Felipe Rodrigo Evangelista Matilde, Wilbert Carpi Silva, Cecilia de Azevedo Castro Cesar
ID – 33	Performance trade offs in IoT-based traffic monitoring and incident detection systems	Samuel Vieira Ducca, Cintia Borges Margi
ID – 34	A Cyber-Physical System for Energy Efficiency and Indoor Air Conditioning of Multiple Office Rooms	Antonio Pestana, Ranulfo Acir de O. Resende, Murilo Nicolau, Marcelo R. Pimentel, Rafael I. Ribeiro, Germano Beraldo, Fabiano Fruett, Josué J. G. Ramos

Legend
IoT Forum (SIoT + LABCIoT)
SIoT
LABCIoT

IoT Forum - General Program								
Symposium on IoT				Congress on IoT				
Oct 24 th		Oct 25 th		Oct 26 th		Oct 27 th		
Start		Start		Start		Start		
				08:40	S6 – ID 17			
09:00	Opening			09:00	S6 – ID 27	09:00	IoT na Cidade do Futuro Keynote: Eduardo Moreira	
		09:20	S3 – ID 29	09:20	S6 – ID 33			
		09:40	S3 – ID 36	09:40	S6 – ID 34		Coffee Break	
		10:00	S3 – ID 38	10:00	Invited: Ricardo Reis (Online)	09:50		
		10:20	S3 – ID 41			10:00		DOA Keynote: Sam Sun Xun (In-person)
10:40	Coffee Break	10:40	Coffee Break	10:40	Coffee Break	10:35	Coffee Break	
11:00	Keynote: Jan Rabaey (In-person)	11:00	Keynote: Sotiris (Online)	11:00	Keynote: Petar (Online)	10:50	SAT Alliance: O maior case de IoT para governo	
		11:05		Segurança Cibernética em IoT - Security by Design				
12:00	Lunch	12:00	Lunch	12:00	Lunch	11:25	Panorama de regulamentações de segurança em IoT na Europa Keynote: Afonso Ferreira (In-person)	
13:30	S1 – ID 12	13:30	S4 – ID 25			12:00	Lunch	
13:50	S1 – ID 24	13:50	S4 – ID 40			12:30	Lunch	
14:10	S1 – ID 26	14:10	S4 – ID 37	14:00	Panorama Internacional Keynote: Mirko Presser (Online)	14:00	Aplicações de IoT na Saúde	
14:30	Invited: Payam (Online)	14:30	Invited: Loureiro (In-person)	15:00		Coffee Break		14:00
15:10	Coffee Break	15:10	Coffee Break	15:20	Educação No mundo IoT	14:50	Aplicações de IoT na Indústria e em Serviços	
15:30	S2 – ID 8	15:30	Invited: Pedro Maló (Online)	15:50		Coffee Break		15:00
15:50	S2 – ID 18	16:10		S5 – ID 35	16:20	Não haverá Metaverso sem IoT	15:20	Novas tecnologias de Redes
16:10	S2 – ID 19	16:30	S5 – ID 30	16:50	S5 – ID 42		16:00	
16:30	S2 – ID 20	17:10	S5 – ID 32	17:20	IoT Student Contest	16:20	IA em Casos Reais de IoT – Cognitive Edge in Real Cases in Progress	
16:50	S2 – ID 22	17:30		17:20			17:00	Negócios de IoT em Grandes Operadoras
17:10				18:00	Programa ELEVATE da Inmarsat	17:20	Encerramento	
				18:00		18:00		
				22:00				

Keynote Speakers



Sotiris Nikolettseas
Patras University



Jan Rabaey
UC Berkeley and IMEC



Petar Popovski
Aalborg University and
Bremen University



Sam Xun Sun
Corporation for National Research
Initiatives (CNRI)



Mirko Presser
Associate Professor,
Aarhus University



Dr. Eduardo Moreira da Costa
Professor of Innovation at the Federal
University of Santa Catarina



Afonso Ferreira
Institut de Recherche en Informatique
de Toulouse (IRIT)

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