

Program for the 7th IEEE Vertical and Topical Internet of Things Summit at RWW2024

Theme: Intelligent Biomedical Applications

Date and Time	Session	Program and Speakers
	Link	Session 1 Recording MP4 File https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/01-24-2024-RWW2024-Session1.mp4
January 24th, 2024 Wednesday 01:30pm-03:30pm EST 12:30pm-02:30pm CST In person and online	Session 1	Chair and Moderator: Jasmin Grosinger <ul style="list-style-type: none">• <i>Opening Remarks</i>• <i>“Technologies that drive the Internet of Things and Intelligent Biomedical Applications.”, Adam Drobot, Chairman, OpenTechWorks Inc., Wayne, Pennsylvania, USA</i> https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/01-24-2024-RWW2024-Adam-Drobot.pdf• <i>“Bringing Your Doctor and Personal Trainer to Your Wrist With SPOT.”, Scott Hanson, Chief Technology Officer, and founder of Ambiq, Austin, Texas USA</i> https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/01-24-2024-RWW2024-Scott-Hanson.pdf• <i>Discussion and Q&A</i> <p><i>(For those attending in person coffee and snacks will be available as part of the RWW2024 shared coffee break at 3:00pm CST)</i></p>

Date and Time	Session	Program and Speakers
	<p>Link</p>	<p>Session 2 Recording MP4 File</p> <p>https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/01-24-2024-RWW2024-Session2.mp4</p>
<p>January 24th, 2024 Wednesday</p> <p>04:00pm-06:00pm EST 03:00pm-05:00pm CST</p> <p>In person and online</p>	<p>Session 2</p>	<p>Chair and Moderator: Charlie Jackson</p> <ul style="list-style-type: none"> <p>“Computational Label-free Microscopy and Point-of-care Sensing.”, Dr. Aydogan Ozcan, California NanoSystems Institute, University of California at Los Angeles (UCLA), Los Angeles, California, USA</p> <p>https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/01-24-2024-RWW2024-Aydogan-Ozcan.pdf</p> <p>“RF Design for Intelligent Biomedical Applications.”, Jasmin Grosinger, Institute of Microwave and Photonic Engineering, Graz University of Technology, Graz, Austria and Tohoku University, Chen Kono Laboratory, Sendai, Japan.</p> <p>https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/02-06-2024-RWW2024-Jasmin-Grosinger.pdf</p> <p>“Developing Standards to Improve TIPSS for Connected Healthcare - Trust, Identity, Privacy, Protection, Safety and Security”, Florence Hudson, Founder and CEO of FDHint LLC., and Executive Director Northeast Big Data Innovation Hub at Columbia University, New York, New York, USA</p> <p>https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/01-22-2024-RWW2024-Florence-Hudson.pdf</p> <p>Discussion and Q&A</p> <p><i>(For those attending in person coffee and snacks will be available as part of the RWW2024 shared coffee break at 3:00pm CST)</i></p>

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	<p>Link</p>	<p>Session 3 Recording MP4 File</p> <p>https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/01-29-2024-RWW2024-Session3.mp4</p>
<p>January 29th, 2024 Monday</p> <p>11:30am-01:30pm EST 10:30am-12:30pm CST</p> <p>Virtual online</p>	<p>Session 3</p>	<p>Chair and Moderator: J.C. Chiao</p> <ul style="list-style-type: none"> <p>“IoT Big Data Orchestration for Precision Medicine.”, Dr. Qingxue Zhang, Indiana University and Purdue University at Indianapolis, Indianapolis, Indiana, USA</p> <p>https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/01-29-2024-RWW2024-Quigxhue-Zhang.pdf</p> <p>“Integration of Brain Computer Interfaces in IoT.”, Jose Gonzalez-España, Electrical and Computer Engineering, Noninvasive Brain-Machine Interface Systems Lab, University of Huston, Huston, Texas, USA, with Lianne Sánchez-Rodríguez, SIEEE, and Jose Luis Contreras-Vidal, FIEEE.</p> <p>https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/01-28-2024-RWW2024-Jose-Gonzalez-Espana.pdf</p> <p>“Recent Commercialization and Preclinical Studies of Biomedical Radar Sensors”, Professor Changzhi Li, Department of Electrical & Computer Engineering, Texas Tech University, Lubbock, Texas, USA</p> <p>https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/01-29-2024-RWW2024-Changzhi-Li.pdf</p> <p>Discussion and Q&A</p>

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	Link	Session 4 Recording MP4 File https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/01-30-2024-RWW2024-Session4.mp4
January 30th, 2024 Tuesday 11:30am-01:30pm EST 10:30am-12:30pm CST Virtual online	Session 4	Chair and Moderator: Adam Drobot <ul style="list-style-type: none"> • “Low-Power Sensing and Wireless Communications Circuits.”, Prof. Patrick P. Mercier, Principal Investigator, Energy-Efficient Microsystems Lab, Co-Director, Center for Wearable Sensors University of California, San Diego, USA https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/01-30-2024-RWW2024-Patrick-Mercier.pdf • “Microwave-Enabled Sustainable Wearables: Devices to Systems.”, Prof. Mahmoud Wagih, University of Glasgow, Glasgow, Scotland UK https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/02-04-2024-RWW2024-Mahmoud-Wagih.pdf • “Introduction to the NIBIB at NIH: Medical Devices Program and Grant Mechanisms.”, Dr. Jessica Falcone, Program Director, Bioengineering Division National Institute of Biomedical Imaging and Bioengineering (NIBIB), National Institutes of Health (NIH), Bethesda, Maryland, USA https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/01-30-2024-RWW2024-Jessica-Falcone.pdf • Discussion and Q&A

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	<p>Link</p>	<p>Session 5 Recording MP4 File</p> <p>https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/01-31-2024-RWW2024-Session5.mp4</p>
<p>January 31st, 2024 Wednesday</p> <p>11:30am-01:30pm EST 10:30am-12:30pm CST</p> <p>Virtual online</p>	<p>Session 5</p>	<p>Chair and Moderator: Charlie Jackson</p> <ul style="list-style-type: none"> <p>“Navigation in Knowledge Spaces with Interactive and Adaptive Information Visualization”, Prof. Tobias Schreck, Institute of Computer Graphics and Knowledge Visualization at Graz University of Technology, Graz, Austria</p> <p>https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/01-31-2024-RWW2024-Tobias-Schreck.pdf</p> <p>“The Ear as a new form of brain and body interface for intelligent health applications.”, Yuchen Xu, Research Scientist at Aizip Inc, Cupertino, California, USA</p> <p>https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/01-31-2024-RWW2024-Yuchen-Xu.pdf</p> <p>“Non-invasive Brain-Computer Interfaces for movement control in paralyzed individuals: Graz' State of the Art.”, Prof. Gernot Müller-Putz, Graz University of Technology, Graz, Austria</p> <p>https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/02-04-2024-WW2024-Gernot-Mueller-Putz.pdf</p> <p>Discussion and Q&A</p>

Date and Time	Session	Program and Speakers
	Link	Session 6 Recording MP4 File https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/02-01-2024-RWW2024-Session6.mp4
February 1st, 2024 Thursday 11:30am-01:30pm EST 10:30am-12:30pm CST Virtual online	Session 6	Chair and Moderator: Jasmin Grosinger <ul style="list-style-type: none"> • <i>“Catalyzing the Integration of Zero-Power Wireless Sensors into medical devices and pharmaceuticals to enhance Personalized Medicine.”, Dr. Sara Amendola</i>, Co-founder, and CEO of RADIO6ENSE, Rome, Italy https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/02-09-2024-RWW2024-Sara-Amendola.pdf • <i>“Design Aspects for Small Brain-implantable Antennas.”, Leena Ukkonen</i>, Faculty of Medicine and Health Technology, Tampere University, Tampere, Finland https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/01-26-2024-RWW2024-Leena-Ukkonen.pdf • <i>“Internet of the Brain for epileptic seizure prediction.”, Magdy A. Bayoumi</i>, Department Head and Professor, Department of Electrical and Computer Engineering, University of Louisiana at Lafayette, Lafayette, Louisiana, USA https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/02-08-2024-RWW2024-Magdy-Bayoumi.pdf • <i>Discussion and Q&A</i>

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	<p>Link</p>	<p>Session 7 Recording MP4 File</p> <p>https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/02-02-2024-RWW2024-Session7.mp4</p>
<p>February 2nd, 2024 Friday</p> <p>11:30am-01:30pm EST 10:30am-12:30pm CST</p> <p>Virtual online</p>	<p>Session 7</p>	<p>Chairs and Moderators: J.C. Chiao, Adam Drobot, Jasmin Grosinger, and Charlie Jackson</p> <ul style="list-style-type: none"> <p>“Microwave breast screening: simulations, hardware, experiments with phantoms and volunteers – what have we learned?”, Prof. Milica Popović, McGill University, Montreal, Canada</p> <p>https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/01-30-2024-RWW2024-Milica-Popovic.pdf</p> <p>“Machine-Learning Techniques to Enhance High-Frequency Electroporation Treatments and Other Biomedical Applications.”, Prof. Luciano Tarricone, IEEE Fellow, University of Salento, Lecce, Italy</p> <p>https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/01-30-2024-RWW2024-Luciano-Tarricone.pdf</p> <p>“Microwaves Technology for Medical Applications.”, J.C. Chiao, Southern Methodist University, Dallas, Texas USA</p> <p>https://rww2024.iot.ieee.org/sites/rww2024.iot.ieee.org/files/02-02-2024-WW2024-J-C-Chaio.pdf</p> <p>Roundtable Discussion, Q&A, and Summit Wrap-up</p>