

Digest is compiled by Alain Louchez, CDAIT Co-founder & Director Emeritus

CHRONICLE OF DIGITAL TRANSFORMATION THROUGH INTERNET OF THINGS

Some biweekly perspectives from around the globe gathered by CDAIT - 50 added for this Digest (2700 entries since April 1, 2022)
https://cdait.gatech.edu/sites/default
/files/202407/Digital\_Transformation\_Through\_
IoT\_Technologies\_July\_31\_2024.pdf

## GOVERNANCE & THE INTERNET OF THINGS

Digital Policy Alert, "United States Digital Policy Alert, "United States of America: Closed Consultation on NCCoE [US National Cybersecurity Center of Excellence] Trusted Internet of Things (IoT) Device Network-Layer Onboarding and Lifecycle Management," July 30,

0476-closed-consultation-on-nccoe-trusted-internet-of-things-iot-device-network-layer-onboarding-and-

Paloma Villa Mateos, "Digital Competitiveness in the EU's Prosperity Plan," Telefónica https://www.telefonica.com/en/comm unication-room/blog/digital-

Paddy Harrington, "Securing IoT devices demands applying zero trust principles," FutureIoT, July

https://futureiot.tech/securing-iot-devices-demands-applying-zero-trust-

Milton Mueller and Brenden Kuerbis, "The U.S. FCC's intrusion into routing security: A comment,"
Georgia Tech Schoolf of Public Policy

Rehana Begg, "FCC Equipment Authorizations: Guidelines for Equipment and IoT Devices, Machine Design, July 15, 2024 https://www.machinedesign.com/auto equipment-authorizations-guidelines-for-equipment-and-iot-devices

Suada Hadzovic, Lejla Becirspahic, Sasa Mrdovic, "**It's time for** Artificial Intelligence

Internet of Thinga, ["the goal of this article is to propose the Artificial Intelligence and the Internet of

# **GT CDAIT** Biweekly IoT News Digest (7/24 - 2)

#### **IoT News and Market Reports**

(Second Half of July 2024)

· Selected IoT-related announcements and featured activities/topics gathered by CDAIT from governments; agencies; consortia; alliances; associations; standards, research and other similar groups around the world - 16 entries:

https://cdait.gatech.edu/sites/default/files/2024-07/IoT\_News\_Filings\_July\_2024\_Second\_Half.pdf

• Sample list of IoT-related market reports gathered by CDAIT - 65 entries: https://cdait.gatech.edu/sites/default/files/2024-07/IoT\_Market\_Reports\_July\_2024\_Second\_Half.pdf

## Georgia Tech IoT-related Info/Research Noticed by CDAIT

- The Wearable Innovations for Health Equity Workshop, hosted jointly by Georgia Tech's Institute for People and Technology, the Center for Wearable Intelligent Systems and Healthcare, the Emory Global Diabetes Research Center, and the Georgia Center for Diabetes Translation Research, **September 10**, **2024** https://research.gatech.edu/ipat/event/wearables-sep10-2024
- Callis, Theodore W., Kexin Hu, Hani Al Jamal, and Manos M. Tentzeris, "Additively Manufactured, Flexible 5G Electronics for MIMO, IoT, Digital Twins, and Smart Cities Applications," International Journal of High Speed Electronics and Systems (2024): 2440066 https://www.worldscientific.com/doi/abs/10.1142/S0129156424400664
- Mamidala, Balaji Narayan, "Advancements in wearable and hardware technologies for health monitoring and management," International Journal of Advanced Research in Engineering and Technology (IJARET), Volume 15, Issue 3, May-June, 2024, pp. 161-171  $https://iaeme.com/Master Admin/Journal\_uploads/IJARET/VOLUME\_15\_ISSU$ E 3/IJARET 15 03 014.pdf

OF NOTE: Matt Hatton, "IoT Security: An Evolving Landscape," IoT for all, July 23, 2024 https://www.iotforall.com/iot-security-anevolving-landscape

#### **Special Reading Suggestions**

- Liz Hughes, "8 Ways IoT, Embedded Technologies Power the 2024 Paris Olympics," IoT world Today, July 26, 2024 https://www.iotworldtoday.com/transportation-logistics/8-ways-iot-embedded-technologies-power-the-2024-paris-olympics
- Zac Amox, "Using IoT to Combat Counterfeits in the Retail Supply Chain," IoT for all, July 25, 2024 https://www.iotforall.com/using-iot-to-combat-
- Carsten Rhod Gregersen, "What The IoT Video Revolution Means For Security," Hackernoon, July 24, 2024 https://hackernoon.com/what-the-iot-videorevolution-means-for-security
- Emily Newston, "What Are the Benefits of Integrating Nanotechnology into IoT?," IoT for all, July 22, 2024 https://www.iotforall.com/what-are-the-benefitsof-integrating-nanotechnology-into-iot
- Juliet Pavelko, "Integrating Technology in Workplace Safety: The Role of AI and IoT," Occupational Health & Safety, July 18, 2024 https://ohsonline.com/Articles/2024/07/17/Integrating-Technology-in-Workplace-Safety-The-Role-of-AI-and-IoT.aspx
- Satyajit Sinha, "Global cellular IoT connectivity market reached \$15B in 2023, 5G set to drive further growth," IoT Analytics, July 16, 2024 https://iotanalytics.com/global-cellular-iot-connectivity/
- Adrian Jennings, "The State of Healthcare IoT," IoT for All [Video 25:00], July 16, 2024 https://www.iotforall.com/podcasts/e352-the-state-of-healthcare-iot

### **Selected IoT Perspectives** Agriculture and the Internet of Things in 2024

"The future of IoT-enabled smart farming looks bright as technologies continue to evolve. Sensors are growing more miniature and cost-effective, making the technology more accessible. As data analytics techniques keep advancing, the IoT will be able to create more value from vast datasets, aiding farmers in yield prediction, disease and weed detection, and optimized resource use. Novel AI algorithms and hi-tech robots – the powerful allies of IoT technology – will further propel intelligent decision-making and elevate productivity on smart farms." Lidiia Lelechenko, "IoT in Agriculture: Paving the Way for Smart Farming," IoT for all, May 2, 2024 https://www.iotforall.com/iot-in-agriculture-paving-the-way-for-smart-farming

- Growing Produce, "How IoT in Agriculture Is Transforming the Way We Grow," Greenhouse Grower, July 23, 2024 https://www.greenhousegrower.com/technology/how-iot-in-agriculture-is-transforming-the-way-we-grow/
- Maximize Market Reseach Pvt. Ltd. press release, "Internet of Things (IoT) Agriculture Market Set to Reach \$25.58 Billion by 2030, Driven by Technological Advancements and Rising Demand," OpenPR, July 18, 2024 https://www.openpr.com/news/3587745/internet-of-things-iot-agriculture-
- Yuliya Melnik, "IoT in Agriculture: Actual Use Cases, Projects, and Main Features," Electronics Media, July 15, 2024 https://www.electronicsmedia.info/2024/07/15/iot-in-agriculture/
- Greg Oppenheim, "Farming smarter with IoT-enabled applications,' Embedded, July 2, 2024 https://www.embedded.com/farming-smarter-with-iot-enabled-
- Martin Lowry, "IoT in Agriculture: How Technology Is Transforming Farming Practices," Global AG Tech Initiative, July 1, 2024 https://www.globalagtechinitiative.com/digital-farming/iot-in-agriculture-how-technology-is-transforming-farming-practices/
- Lily Bhavna Kauler, "Which Countries Use IoT in Agriculture in 2024?," Tree of Life Centre Foundation, June 30, 2024 https://treeoflifecentre.in/whichcountries-use-iot-in-agriculture-in-2024/
- Oleg Nalyvaiko, "How to Build an IoT Data Platform for Agriculture," Infopulse, updated February 21, 2024 https://www.infopulse.com/blog/iot-data-
- Przemek Szleter, "From Soil To Satellite: Five Ways IoT Will Impact Modern Agriculture," Forbes, February 8, 2024 https://www.forbes.com/sites/forbestechcouncil/2024/02/08/from-soil-to-satellite-five-ways-iot-will-impact-modern-agriculture/five-will-impact-modern-agriculture/f
- Emily Bowen, "Emerging trends in the agriculture IoT market 2024," Telnyx, January 3, 2024 https://telnyx.com/resources/agriculture-iot-market

Research background info (sample): Hammad Shahab, Muhammad Iqbal, Ahmed Sohaib, Farid Ullah Khan, Mohsin Waqas, "IoTbased agriculture management techniques for sustainable farming: A comprehensive review," Computers and Electronics in Agriculture, Volume 220, May 2024, 108851, ISSN 0168-1699, https://doi.org/10.1016/j.compag.2024.108851; P. Vaishnavi, V. Ramakrishna, Komuraiah Akula, Nasra Fatima, Kudakala Saikrishna, Ganapathi Raju NV and Soosan Chhabra, "An Efficient Agricultural Data Analysis Based On IOT," MATEC  $Web\ Conf., 392\ (published\ online\ March\ 18, 2024)\ 01098\ DOI:\ https://doi.org/10.1051/matecconf/202439201098;\ Shukre, V.\ A.\ .,\ Kanade,\ A.\ .,\ A.$ S. ., & Patil, S. S. (published February 13, 2024). "State Of Art Technology And Framework For Iot Based Agricultural Systems," Migration Letters, 21(S<sub>5</sub>), 816-837 https://migrationletters.com/index.php/ml/article/view/7794;



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