



## CHRONICLE OF DIGITAL TRANSFORMATION THROUGH INTERNET OF THINGS TECHNOLOGIES

Some biweekly perspectives from around the globe gathered by CDAIT

(1650 entries since April 1, 2022)  
[https://cdait.gatech.edu/sites/default/files/2023-09/Digital\\_Transformation\\_Through\\_IoT\\_Technologies\\_September\\_15\\_2023.pdf](https://cdait.gatech.edu/sites/default/files/2023-09/Digital_Transformation_Through_IoT_Technologies_September_15_2023.pdf)

## GOVERNANCE & THE INTERNET OF THINGS

Kim Eckart, "Q&A: Older adults want more say in companion robots, AI and data collection," University of Washington News, September 6, 2023  
<https://www.washington.edu/news/2023/09/06/qa-older-adults-want-more-say-in-companion-robots-ai-and-data-collection/>

Michael Khan, "Got Thoughts on the Sad State of IoT Security? The FCC Wants to Know," PC Magazine, September 5, 2023  
<https://www.pcmag.com/news/got-thoughts-on-the-sad-state-of-iot-security-the-fcc-wants-to-know>

WHO press release, "Digital health divide: only 1 in 2 countries in Europe and central Asia have policies to improve digital health literacy, leaving millions behind," WHO, September 5, 2023  
<https://www.who.int/europe/news/item/05-09-2023-digital-health-divide-only-1-in-2-countries-in-europe-and-central-asia-have-policies-to-improve-digital-health-literacy--leaving-millions-behind>

Sean Ashcroft, "Data is the true currency of Industrial IoT tech," Supply Chain Digital, September 4, 2023  
<https://supplychaindigital.com/articles/data-is-the-true-currency-of-industrial-iot-tech>

Eliot Brown, "The Disappointing Bet That Could Turn Into the Biggest IPO of the Year," The Wall Street Journal, September 3, 2023  
<https://www.wsj.com/tech/the-disappointing-bet-that-could-turn-into-the-biggest-ipo-of-the-year-3406c6dc>

# GT CDAIT

## Biweekly IoT News Digest (09/23 – 1)

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

### IoT News and Market Reports

(First Half of September 2023)

- 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 – 15 entries: [https://cdait.gatech.edu/sites/default/files/2023-09/IoT\\_News\\_Filings\\_September\\_2023\\_First\\_Half.pdf](https://cdait.gatech.edu/sites/default/files/2023-09/IoT_News_Filings_September_2023_First_Half.pdf)
- Sample list of IoT-related market reports gathered by CDAIT – 80 entries: [https://cdait.gatech.edu/sites/default/files/2023-09/IoT\\_Market\\_Reports\\_September\\_2023\\_First\\_Half.pdf](https://cdait.gatech.edu/sites/default/files/2023-09/IoT_Market_Reports_September_2023_First_Half.pdf)

- Arora, Amit; Arora, Anshu; and McIntyre, John. "Developing Chatbots for Cyber Security: Assessing Threats through Sentiment Analysis on Social Media," Sustainability, published September 1, 2023, 15, 13178. <https://doi.org/10.3390/su151713178>
- O'Heir, Jeff. "Building the Business Case for Industry 4.0." Mechanical Engineering 145, no. 3 (2023): 30-35 [incl. Georgia Tech's Georgia Manufacturing 4.0 Listening Day, March 2022 workshop] <https://asmedigitalcollection.asme.org/memagazineselect/article/145/3/30/1166237>
- Nelson, John P., Justin B. Biddle, and Philip Shapira. "Applications and Societal Implications of Artificial Intelligence in Manufacturing: A Systematic Review." Submitted July 25, 2023 <https://arxiv.org/abs/2308.02025>

**OF NOTE:** Elizabeth Craig, Brian Finch, The Honorable Jerry McNeerney, Lee Petro, Glenn Richards, and Amaris Trozzo, "Administration Poised to Act on 'Internet of Things' Devices," JD Supra, August 28, 2023 <https://www.jdsupra.com/legalnews/administration-poised-to-act-on-2827037/>; Mike Dano, "Is the IoT module debate about security, competition or xenophobia?" Light Reading, August 28, 2023 <https://www.lightreading.com/iot/is-iot-module-debate-about-security-competition-or-xenophobia/a/d-id/786271>; Nathan Ord, "Chinese Cellular IoT Radio Modules Pose An Alarming US National Security Risk," Hardware, August 30, 2023 <https://hothardware.com/news/chinese-manufactured-iot-cellular-modules-raise-national-security-risk>; Dave Altavilla, "Securing The IoT From The Threat China Poses To US Infrastructure," Forbes, August 31, 2023 <https://www.forbes.com/sites/davealtavilla/2023/08/31/securing-the-iot-from-the-threat-china-poses-to-us-infrastructure/?sh=42f7a4c3102b>; Reuters, "US FCC chair says China's IoT cellular components makers Quectel, Fibocom may pose national security risks," South China Morning Post, September 7, 2023 <https://www.scmp.com/tech/tech-war/article/3233671/us-fcc-chair-says-chinas-iot-cellular-components-makers-quectel-fibocom-may-raise-national-security>

### Special Reading Suggestions

- Dimitris Paraskevopoulos, "Successful IoT software commercialization: 7 important considerations according to IoT executives," September 6, 2023 <https://iot-analytics.com/successful-iot-software-commercialization/>
- Nassia Skoulikariti, "Unlocking the Magic of IoT: Where Technology Meets Wizardry," The Fast Mode, September 4, 2023 <https://www.thefastmode.com/expert-opinion/33177-unlocking-the-magic-of-iot-where-technology-meets-wizardry>
- IoT Business News posting, "The Construction Industry Meets IoT: Why This is a Match Made in Silicon Heaven," IoT Business News, September 3, 2023 <https://iotbusinessnews.com/2023/09/03/89400-the-construction-industry-meets-iot-why-this-is-a-match-made-in-silicon-heaven/>
- Conure, "IoT and 5G: Transforming Public Transportation System," IoT for all, September 1, 2023 <https://www.iotforall.com/iot-and-5g-transforming-public-transportation-system>
- Leon Thorn, "Internet of Things (IoT): A disabled persons perspective," Medium, August 31, 2023 <https://medium.com/@leonthorn2001/internet-of-things-iot-a-disabled-persons-perspective-3788c391310e>
- Kalpesh Baviskar, "The vital role of industrial IoT gateways in bridging IT and OT," IoT Analytics, August 30, 2023 <https://iot-analytics.com/vital-role-of-industrial-iot-gateways-bridging-it-ot/>

### Selected IoT Perspectives

#### "Massive IoT"

"Doing 10 times more with 10 times less is how we are going to save the planet, and how many public and commercial sectors will survive too. And it is all about massive IoT." Svein-Egil Nielsen, "Massive IoT – doing 10 times more with 10 times less (Reader Forum)," RCR Wireless News, August 29, 2023 <https://www.rcrwireless.com/20230829/internet-of-things-4/massive-iot-doing-10-times-more-with-10-times-less-reader-forum#>

- Bruce Chatterley, "How LoRaWAN and Massive IoT are Reshaping Business and Society," ReadWrite, September 1, 2023 <https://readwrite.com/how-lorawan-and-massive-iot-are-reshaping-business-and-society/>
- James Blackman, "This is not convergence – divergence, Darwinism and the death of IoT Inc.," RCR Wireless, August 31, 2023 <https://www.rcrwireless.com/20230831/internet-of-things-4/this-is-not-consolidation-divergence-darwinism-and-the-death-of-iot-inc>
- Hanumant Pawar, "Big Role for 5G RedCap in 5G Evolution, Massive IoT Adoption," Counterpoint, August 3, 2023 <https://www.counterpointresearch.com/5g-redcap-massive-iot-adoption/>
- Norbert Muhrer, "Massive IoT demands the unique capabilities of hyperscale vendors," IoT News, July 5, 2023 <https://www.iottechnews.com/news/2023/jul/05/massive-iot-demands-unique-capabilities-hyperscale-vendors/>
- UnaBiz, "Ensuring Data Integrity for Massive IoT Deployments," IoT for All, May 18, 2023 <https://www.iotforall.com/ensuring-data-integrity-for-massive-iot-deployments>
- Thales, "How massive iot is changing the world," Thales Group website, February 20, 2023 <https://www.thalesgroup.com/en/worldwide-digital-identity-and-security/mobile/magazine/how-massive-iot-changing-world>

**Research background info (sample):** Juhari, Mohammed, Nasir Saeed, Mohamed-Slim Alouini, and El Mehdi Amhoud, "A survey on scalable LoRaWAN for massive IoT: Recent advances, potentials, and challenges," IEEE Communications Surveys & Tutorials (published May 10, 2023) <https://ieeexplore.ieee.org/abstract/document/10122600>; Alotaibi, Asma, and Ahmed Barnawi, "Securing massive IoT in 6G: Recent solutions, architectures, future directions," *Internet of Things* (July 2023): 100715 <https://www.sciencedirect.com/science/article/abs/pii/S2542660523000380>; Sharma, Rinku, Ashish Sharma, Garima Chandel, and Vishal Goyal, "Beyond 5G Communication Networks Enabling Massive IoT," In 2023 International Conference on Power, Instrumentation, Control and Computing (PICCC), pp. 1-6. IEEE, April 2023 <https://ieeexplore.ieee.org/abstract/document/10142732>; Saravanan, V., P. Sreelatha, Nageswara Rao Atyam, M. Madiajagan, D. Saravanan, and H. Parveen Sultana, "Design of deep learning model for radio resource allocation in 5G for massive iot device," Sustainable Energy Technologies and Assessments 56 (March 2023): 103054 <https://www.sciencedirect.com/science/article/abs/pii/S2213138823000462>; Babbar, Himanshi, Shalini Rani, Ouns Bouachir, and Moayad Aloqlay, "From Massive IoT Toward IoE: Evolution of Energy Efficient Autonomous Wireless Networks," IEEE Communications Standards Magazine 7, no. 2 (2023): 32-39 <https://ieeexplore.ieee.org/abstract/document/10148972>; Vangelista, Lorenzo, Bruno Jechoux, Jean-Xavier Canonici, and Michele Zorzi, "Golden Modulation: A New and Effective Waveform for Massive IoT," arXiv preprint arXiv:2304.04889 (April 2023) <https://arxiv.org/abs/2304.04889>; Qiao, Li, Anwen Liao, Zhen Gao, and Hua Wang, "Indoor Massive IoT Access Relying on Millimeter-Wave Extra-Large-Scale MIMO," In 2023 IEEE Wireless Communications and Networking Conference (WCNC), pp. 1-6. IEEE, 2023 <https://ieeexplore.ieee.org/abstract/document/10118760>;

