



## CHRONICLE OF DIGITAL TRANSFORMATION THROUGH INTERNET OF THINGS TECHNOLOGIES

Some biweekly perspectives from around the globe gathered by CDAIT

(1550 entries since April 1, 2022)  
[https://cdait.gatech.edu/sites/default/files/2023-08/Digital\\_Transformation\\_Through\\_IoT\\_Technologies\\_August\\_15\\_2023.pdf](https://cdait.gatech.edu/sites/default/files/2023-08/Digital_Transformation_Through_IoT_Technologies_August_15_2023.pdf)

## GOVERNANCE & THE INTERNET OF THINGS

National Conference of State Legislatures (NCSL) staff Erlinda Doherty, Susan Frederick, and Heather Morto [with contribution and review from the members of the NCSL Task Force on Cybersecurity and Privacy Work Group and the NCSL Foundation sponsors], "Approaches to Regulating Artificial Intelligence: A Primer," NCSL, August 10, 2023  
<https://www.ncsl.org/technology-and-communication/approaches-to-regulating-artificial-intelligence-a-primer>

Shaun Waterman and Didi Kirsten STatlow, "China's Plan to Rule the World's Smart Devices, FCC Urged to Act," Newsweek, August 8, 2023  
<https://www.newsweek.com/china-s-plan-rule-world-iot-smart-devices-fcc-urged-act-1817682>

Devin Partida, "Data Management: Types and Challenges," Datamation, August 7, 2023  
<https://www.datamation.com/big-data/data-management-types-and-challenges/>

Infinity Business Insights press release, "AI and Automation in Urban Governance: Creating Efficient Intelligent Cities," OpenPR, August 4, 2023  
<https://www.openpr.com/news/3155110/ai-and-automation-in-urban-governance-creating-efficient>

Jacob Ninan, "Software services industry in transition," [about India's tech companies], Observer Research Foundation, August 3, 2023  
<https://www.orfonline.org/expert-speak/software-services-industry-in-transition/>

# GT CDAIT

## Biweekly IoT News Digest (08/23 – 1)

### IoT News and Market Reports

(First Half of August 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/2023-08/IoT\\_News\\_Filings\\_August\\_2023\\_First\\_Half.pdf](https://cdait.gatech.edu/sites/default/files/2023-08/IoT_News_Filings_August_2023_First_Half.pdf)
- Sample list of IoT-related market reports gathered by CDAIT – 80 entries: [https://cdait.gatech.edu/sites/default/files/2023-08/IoT\\_Market\\_Reports\\_August\\_2023\\_First\\_Half.pdf](https://cdait.gatech.edu/sites/default/files/2023-08/IoT_Market_Reports_August_2023_First_Half.pdf)

**OF NOTE:** IEEE International Conference on Artificial Intelligence, Blockchain, and Internet of Things, (AIBThings), Central Michigan University (CMU), Mount Pleasant, Michigan, September 16-17, 2023, <https://aibthings.com/> --- 7th Workshop on Internet of Things – Enablers, Challenges and Applications (IoT-ECAW'23), Warsaw, Poland, September 17-20, 2023 <https://fedcsis.org/sessions/nsa/iot-ecaw> --- IEEE 9th World Forum on Internet of Things (WF-IoT), Centro de Congressos de Aveiro, Aveiro, Portugal, October 12-27, 2023 <https://iot.ieee.org/> --- Georgia Tech 2023 (9th) IoT for Manufacturing (IoTfM) Symposium, November 8, 2023, Georgia Tech Manufacturing Institute, Factory Information Systems Center, on site at GT Calloway Manufacturing Research Building, Atlanta, GA (more details to follow)

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

- Kra-Bassa, Archange, Janet Tocho, and Mercy Daniel-Aguebor, "Using Neural Networks for Semiconductor Package Optimization," In 2023 IEEE International Opportunity Research Scholars Symposium (ORSS), pp. 67-69. IEEE, 2023  
<https://ieeexplore.ieee.org/abstract/document/10161948>
- Herbert, Robert, and Woon-Hong Yeo. "Vascular Health: The Power of Implantable Wireless Electronics." TheScienceBreaker 9, no. 3 (July 18, 2023) <https://oap.unige.ch/journals/tsb/article/view/887>

### Special Reading Suggestions

- Serguei Ivanov, "7 Patient Benefits Of IoT-Connected Medical Devices," Med Device Online, August 14, 2023 <https://www.meddeviceonline.com/doc/patient-benefits-of-iot-connected-medical-devices-0001>
- Scarlett Evans, "How IoT Is Helping Seniors Age in Place," IoT World Today, August 9, 2023 <https://www.iotworldtoday.com/health-care/how-iot-is-helping-seniors-age-in-place>
- Claire James, "Everything you Wanted to Know About IoT Testing," UniverseNews Network, August 7, 2023 <https://www.universenewsnetwork.com/2023/08/07/everything-you-wanted-to-know-about-iot-testing/>
- Renesas press release, "Renesas to Acquire Cellular IoT Technology Leader Sequans Through Tender Offer," Renesas website, August 7, 2023 <https://www.renesas.com/us/en/about/press-room/renesas-acquire-cellular-iot-technology-leader-sequans-through-tender-offer>
- FutrelIoT editors, "Where IoT spending will go from 2023 to 2027," FutrelIoT, August 3, 2023 <https://futureiot.tech/where-iot-spending-will-go-from-2023-to-2027/>
- Estafania Quiroz, "Key Advantages of Satellite IoT Deployments," IoT for All, August 2, 2023 <https://www.iotforall.com/key-advantages-of-satellite-iot-deployments>
- ManojKumar847, "Increase efficiency of manufacturing operations with IoT solutions," Data Science Central, July 31, 2023 <https://www.datasciencecentral.com/increase-efficiency-of-manufacturing-operations-with-iot-solutions/>

### Selected IoT Perspectives

#### IoT and Edge Computing

"The Edge Computing Market has experienced remarkable expansion and innovation over recent years, thanks to IoT device proliferation and applications generating vast quantities of data that need efficient processing close to the source," Prudour Private Limited press release, "Edge Computing Market Is Predicted USD 206 Billion in Revenues By 2032 At CAGR of 18.3%," Enterprise Apps Today, July 27, 2023  
[https://www.enterpriseappstoday.com/news/edge-computing-market-is-predicted-usd-206-billion-in-revenues-by-2032-at-cagr-of-18-3.html#google\\_vignette](https://www.enterpriseappstoday.com/news/edge-computing-market-is-predicted-usd-206-billion-in-revenues-by-2032-at-cagr-of-18-3.html#google_vignette)

- Steven Caliguri, "Secure IoT location awareness: why edge wins over cloud," Embedded, August 11, 2023 <https://www.embedded.com/secure-iot-location-awareness-why-edge-wins-over-cloud/>
- Megan Crouse, "Cloud Data Systems and Edge AI Make a Major Impact on Today's Data Science," TechRepublic, August 3, 2023 <https://www.techrepublic.com/article/gartner-machine-learning-data-science-trends/>
- Nitesh Kumar, "Understanding the Differences Between IoT and Edge Computing," Analytics Insight, July 30, 2023 <https://www.analyticsinsight.net/understanding-the-differences-between-iot-and-edge-computing/>
- The Star [Malaysia], "Edge computing: The future of AI and IoT," The Star, July 20, 2023 <https://www.thestar.com.my/starpics/2023/07/20/edge-computing-the-future-of-ai-and-iot>
- Vertiv, "What Is IoT Edge Computing? Infrastructure for the Edge," Vertiv, May 29, 2023 <https://www.vertiv.com/en-emea/about/news-and-insights/articles/educational-articles/what-is-iot-edge-computing-infrastructure-for-the-edge/>
- Scale Computing, "IoT Edge Computing," Scale Computing, May 16, 2023 <https://www.scalecomputing.com/resources/iot-edge-computing>
- Aiswarya PM, "Top 10 Outstanding IoT Edge Computing Platforms of 2023," Analytics Insight, March 23, 2023 <https://www.analyticsinsight.net/top-10-outstanding-iot-edge-computing-platforms-of-2023/>
- RedHat, "What is IoT Edge computing?" RedHat, July 29, 2022 <https://www.redhat.com/en/topics/edge-computing/iot-edge-computing-need-to-work-together>

**Research background info (sample):** Ben Sada, Abdelkarim, Abdenacer Naouri, Amar Khelloufi, Sahraoui Dhelim, and Huansheng Ning. "A Context-Aware Edge Computing Framework for Smart Internet of Things," Future Internet 15, no. 5 (2023): 154 <https://www.mdpi.com/1999-5903/15/5/154>; Xue, He, Dajiang Chen, Ning Zhang, Hong-Ning Dai, and Keping Yu, "Integration of blockchain and edge computing in internet of things: A survey," Future Generation Computer Systems 144 (July 2023): 307-326 <https://www.sciencedirect.com/science/article/abs/pii/S0167739X22003521>; Lu, Siliang, Jinfeng Lu, Kang An, Xiaoxian Wang, and Qingbo He. "Edge computing on IoT for machine signal processing and fault diagnosis: A review," IEEE Internet of Things Journal (2023) <https://ieeexplore.ieee.org/abstract/document/10026418>; Chi, Hao Ran, "Edge Computing for the Internet of Things," Journal of Sensor and Actuator Networks 12, no. 1 (2023): 17 <https://www.mdpi.com/2224-2708/12/1/17>; Sekonya, Nkata, and Siphesihle Sithungu, "The Impact of Edge Computing on the Industrial Internet of Things," In International Conference on Cyber Warfare and Security, vol. 18, no. 1, pp. 360-368. 2023 <https://papers.academic-conferences.org/index.php/iccws/article/view/969>; See also: The [EU] Alliance for IoT and Edge Computing Innovation (AIOTI) <https://aioti.eu/>