



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

#### CHRONICLE OF DIGITAL TRANSFORMATION THROUGH INTERNET OF THINGS TECHNOLOGIES

Some biweekly perspectives from  
around the globe gathered by  
CDAIT - 50 added for this Digest  
(2850 entries since April 1, 2022)  
[https://cdait.gatech.edu/sites/default/files/2024-09/Digital\\_Transformation\\_Through\\_IoT\\_Technologies\\_September\\_15\\_2024.pdf](https://cdait.gatech.edu/sites/default/files/2024-09/Digital_Transformation_Through_IoT_Technologies_September_15_2024.pdf)

#### GOVERNANCE & THE INTERNET OF THINGS

National Institute of Standards and Technology (NIST) press release, "Building a Cybersecurity and Privacy Learning Program: NIST Publishes SP 800-50r1," NIST, September 12, 2024  
<https://www.nist.gov/news-events/news/2024/09/building-cybersecurity-and-privacy-learning-program-nist-publishes-sp-800>

U.S. Equal Opportunity Commission, "EEOC Research Finds Unequal Opportunity in the High Tech Sector and Workforce," EEOC, September 11, 2024  
<https://www.eeoc.gov/newsroom/eeoc-research-finds-unequal-opportunity-high-tech-sector-and-workforce>

Michael Spence, "AI's Promise for the Global Economy," International Monetary Fund, September 2024  
<https://www.imf.org/en/Publications/fandd/issues/2024/09/AIs-promise-for-the-global-economy-Michael-Spence>

Janne Saarela, "AI, Edge, and IoT Demand a Software-Centric Approach," Information Week, September 3, 2024  
<https://www.informationweek.com/software-services/ai-edge-and-iot-demand-a-software-centric-approach>

Arthur J. Gallagher & Co., "Hidden Dangers: Undersea Cables and How Disruption Can Lead to Financial Risk," Gallagher, August 2024  
<https://www.ajg.com/us/news-and-insights/features/2024/aug/undersea-cables-and-how-disruption-can-lead-to-financial-risk/>

FCC press release, "FCC Announces IoT Labeling Rules Effective September 9, 2024," FCC, August 5, 2024  
<https://www.fcc.gov/document/fcc-announces-iot-labeling-rules-effective-september-9-2024>

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## Biweekly IoT News Digest (9/24 – 1)

### IoT News and Market Reports

(First Half of September 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 – 15 entries: [https://cdait.gatech.edu/sites/default/files/2024-09/IoT\\_News\\_Filings\\_September\\_2024\\_First\\_Half.pdf](https://cdait.gatech.edu/sites/default/files/2024-09/IoT_News_Filings_September_2024_First_Half.pdf)
- Sample list of IoT-related market reports gathered by CDAIT – 50 entries: [https://cdait.gatech.edu/sites/default/files/2024-09/IoT\\_Market\\_Reports\\_September\\_2024\\_First\\_Half.pdf](https://cdait.gatech.edu/sites/default/files/2024-09/IoT_Market_Reports_September_2024_First_Half.pdf)

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

- Xie, Xianjian, Xiaochen Xian, Dan Li, and Andi Wang, "Adversarial Client Detection via Non-parametric Subspace Monitoring in the Internet of Federated Things," IJSE Transactions just-accepted (published online July 29, 2024): 1-23  
<https://www.tandfonline.com/doi/abs/10.1080/24725854.2024.2367224>
- Maqsoodi, Aras, and Javier Irizarry, "A Framework and Cyber-Physical System Architecture for Cloud-Based Construction Monitoring with Autonomous Quadrupeds," In ISARC. Proceedings of the International Symposium on Automation and Robotics in Construction, vol. 41, pp. 243-250. IAARC Publications, 2024  
<https://www.proquest.com/openview/6f40d6649cab5f427c0c06ca44126478/1?pq-origsite=gscholar&cbl=1646340>
- Xie, Xinkai, Qinan Wang, Chun Zhao, Qilei Sun, Haicheng Gu, Junyan Li, Xin Tu et al. "Neuromorphic Computing-Assisted Triboelectric Capacitive-Coupled Tactile Sensor Array for Wireless Mixed Reality Interaction," ACS Nano (June 21, 2024) <https://pubs.acs.org/doi/full/10.1021/acsnano.4c03554>

**OF NOTE:** Dimitris Paraskevopoulos, "The top 10 IoT use cases," IoT Analytics, September 11, 2024 <https://iot-analytics.com/top-10-iot-use-cases/>; and Satyajit Sinha, "State of IoT 2024: Number of connected IoT devices growing 13% to 18.8 billion globally," IoT Analytics, September 3, 2024 <https://iot-analytics.com/number-connected-iot-devices/>

### Special Reading Suggestions

- Chris Baird, "The IoT Trends Shaping Industry in 2024 and Beyond," IoT for all, September 12, 2024 <https://www.iotforall.com/the-iot-trends-shaping-industry-in-2024-and-beyond>
- Brian Karlsson, "Smart Homes: What the Future Holds for IoT Devices," Nerdbot, September 7, 2024 <https://nerdbot.com/2024/09/07/smart-homes-what-the-future-holds-for-iot-devices/>
- Arun Shankar, "What are the industrial applications of digital twins and IoT?," Intelligent CIO, September 5, 2024  
<https://www.intelligentcio.com/me/2024/09/05/what-are-the-industrial-applications-of-digital-twins-and-iot/>
- Adrian Wooldridge, "Wake Me When the Internet of Things Is Over," Bloomberg, September 4, 2024 <https://www.bloomberg.com/opinion/articles/2024-09-04/internet-of-things-is-falling-flat-with-consumers>
- Market.us, "IoT in Warehouse Management Market: Revolutionizing Logistics with Connected Devices," Global Trade Magazine, September 3, 2024  
<https://www.globaltrademag.com/iot-in-warehouse-management-market-revolutionizing-logistics-with-connected-devices/>
- Staff reporter at International Business Times (UK), "Revolutionizing Manufacturing: Key Enterprise Upgrades For Enhanced IoT Visibility," International Business Times, September 2, 2024 <https://www.ibtimes.co.uk/revolutionizing-manufacturing-key-enterprise-upgrades-enhanced-iot-visibility-1726614>
- Chris Baird, "The IoT Trends Shaping Industry in 2024 and Beyond," IoT Business News, September 1, 2024 <https://iotbusinessnews.com/2024/09/01/08700-the-iot-trends-shaping-industry-in-2024-and-beyond/>

### Selected IoT Perspectives IoT Analytics

"IoT Analytics provides organizations to understand the Internet of things data which is generated by various connected IoT devices. This tools and procedure can help companies at their disposal, with a focus on reducing maintenance cost, improving business operations and avoiding equipment failures. Moreover, various sectors including restaurant chains, retailers, connected logistics, manufacturers of consumer goods and others can use data from wearable technologies, smartphones and in-home devices for their marketing and promotions." HTF Market Intelligence Consulting Private Limited press release, "IoT Analytics Market is Likely to Experience a Tremendous Growth in Near Future" OpenPR, August 16, 2024 <https://www.openpr.com/news/3633926/iot-analytics-market-is-likely-to-experience-a-tremendous-growth>

- TechObserver desk, "Jakarta Smart City uses IoT analytics to better serve residents," TechObserver, September 1, 2024  
<https://techobserver.in/news/egov/smart-cities/jakarta-smart-city-uses-iot-analytics-to-better-serve-residents-sas-287329/>
- Sudeep Srivastava, "IoT Data Analytics: Types, Use Cases, and Implementation," Appinventiv, August 20, 2024 <https://appinventiv.com/blog/iot-data-analytics/>
- Bergen Adair, "IoT Analytics: How to Bring Even More Power to Your Business," SelectHub, August 20, 2024  
<https://www.selecthub.com/business-intelligence/analytics-behind-iot/>
- Michael Georgiou, "IoT Data Analytics: Types, Applications, and Implementation Guide," Imaginovation, June 14, 2024  
<https://imaginovation.net/blog/iot-data-analytics-guide/>
- Birendra Kumar Sahu, "What is IoT Data Analytics?" IntelliPaat, April 14, 2024 <https://intellipa.com/blog/tutorial/data-analytics-tutorial/iot-data-analytics/>
- Adelina Sarmiento, "IoT Analytics: the necessary journey to reimagining the future of industries," Keeper, March 13, 2024  
<https://keeper.io/2024/03/13/iot-analytics-the-necessary-journey-to-reimagining-the-future-of-industries/>

**Research background info (sample):** Glikopoulos, Panagiotis, Peter Kropf, Valerio Schiavoni, and Josef Spillner. "Reliable IoT analytics at scale," Journal of Parallel and Distributed Computing 187 (May 2024): 104840  
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<https://www.computersciencejournals.com/ijcit/article/71/5-1-1-631.pdf>; Thirumagal, P. G., Surendar Vaddepalli, Tapas Das, Seshanwita Das, Srinu Madem, and P. S. Immaculate. "AI-Enhanced IoT Data Analytics for Risk Management in Banking Operations," In 2024 5th International Conference on Recent Trends in Computer Science and Technology (ICRTCTST), pp. 177-181. IEEE, 2024  
<https://ieeexplore.ieee.org/abstract/document/10578533>; Tusa, Francesco, Stuart Clayman, Alina Buzachis, and Maria Fazio. "Microservices and serverless functions—lifecycle, performance, and resource utilisation of edge based real-time IoT analytics," Future Generation Computer Systems 155 (2024): 204-218  
<https://www.sciencedirect.com/science/article/pii/S0167739X24000529>

<https://cdait.gatech.edu>



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