



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
(2750 entries since April 1, 2022)
https://cdait.gatech.edu/sites/default/files/2024-08/Digital_Transformation_Through_IoT_Technologies_August_15_2024.pdf

GOVERNANCE & THE INTERNET OF THINGS

Anna Ribeiro, "Senate bill to boost federal cybersecurity measures, implement mandatory vulnerability disclosure policies," Industrial Cyber, August 12, 2024
<https://industrialcyber.co/regulation-standards-and-compliance/senate-bill-to-boost-federal-cybersecurity-measures-implement-mandatory-vulnerability-disclosure-policies/>

Emilie Brown, "IoT and Accessibility: Transforming Accessible Digital Experiences," IoT for all, August 12, 2024
<https://www.iotforall.com/iot-and-accessibility-transforming-accessible-digital-experiences>

Aayushya Ranjan, "[Oman's] Telecom Regulator Seeks Public Input on Future Spectrum Use for IMT and Satellite IoT Systems," TechAfrica News, August 12, 2024
<https://www.techafrikanews.com/2024/08/12/telecom-regulator-seeks-public-input-on-future-spectrum-use-for-imt-and-satellite-iot-systems/>

Hosted by Daniel Litwin, the discussion [1:00:21 video] features insights from Eric O'Neill, Founder of The Georgetown Group; Subbu Sthanu, Chief Commercial Officer at IPVanish; Mike Saylor, Ph.D., Executive Director of the Cyber Defense Center; and Paul Doherty, President & CEO of The Digit Group (TDG) "Is At-Home IoT Ready to Defend Against Cyber Threats?" MarketScale, August 9, 2024
<https://marketscale.com/industries/experts-talk/at-home-iot-cyber-threats-defense/>

Insightful Market Research press release, "North America IoT Data Governance Market by Application: Opportunities," LinkedIn, August 5, 2024
https://www.linkedin.com/pulse/north-america-iot-data-governance-market-application-rdoqf?trk=organization_guest_main-feed-card_feed-article-content

GT CDAIT

Biweekly IoT News Digest (8/24 – 1)

IoT News and Market Reports

(First Half of August 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/2024-08/IoT_News_Filings_August_2024_First_Half.pdf
- Sample list of IoT-related market reports gathered by CDAIT – 50 entries:
https://cdait.gatech.edu/sites/default/files/2024-08/IoT_Market_Reports_August_2024_First_Half.pdf

Georgia Tech IoT-related Info/Research Noticed by CDAIT

- Greenlee, Eric, Blaine Rothrock, Hyeonwook Kim, Ellen Zegura, and Josiah Hester. "The Devil You Know: Barriers and Opportunities for Co-Designing Microclimate Sensors." ACM Journal on Computing and Sustainable Societies (online August 2, 2024) <https://dl.acm.org/doi/abs/10.1145/3685695>
- Sattar, Maria, Yoon Jae Lee, Hyeonseok Kim, Michael Adams, Matthew Guess, Juhyeon Kim, Ira Soltis et al. "Flexible Thermoelectric Wearable Architecture for Wireless Continuous Physiological Monitoring," ACS Applied Materials & Interfaces (July 9, 2024)
<https://pubs.acs.org/doi/full/10.1021/acsami.4c02467>
- Bagchi, Saurabh, Mahsa Ghasemi, Kang G. Shin, Nalini Venkatasubramanian, Dongyan Xu, and Saman Zonouz. "Role of Resilience in Cyber-Physical Systems: A Roundtable Panel," Computer 57, no. 7 (2024): 154-159
<https://ieeexplore.ieee.org/abstract/document/10574453>

OF NOTE: Margo Anderson, "Quantum Cryptography Has Everyone Scrambling -- China, India, the EU, and the US are all pursuing divergent approaches," IEEE Spectrum, August 8, 2024 https://spectrum.ieee.org/quantum-key-distribution?mc_cid=201a0d2b7a&mc_eid=cf0b0e87e1

Special Reading Suggestions

- Sindhy V Kashyap, "Harnessing Technology for a Sustainable Future: The Role of Intelligent Grids and IoT in Energy Management," Edge, August 12, 2024 <https://www.edgemeddleast.com/emergent-tech/harnessing-technology-for-a-sustainable-future-the-role-of-intelligent-grids-and-iot-in-energy-management>
- Lori Diroto, "How Telematics and IoT Improve Boom & Scissor Lift Operation," For Construction Pros, August 12, 2024
<https://www.forconstructionpros.com/rental/lifting-equipment/article/22914583/how-telematics-and-iot-improve-boom-scissor-lift-operation>
- Gary Elinoff, "IIoT Basics and Key Benefits of Industrial Internet of Things," Electropages, August 8, 2024
<https://www.electropages.com/blog/2024/08/introduction-to-iiot-the-industrial-internet-of-things>
- Alan Lu, "The Internet of Things: Everything you need to know," Vodafone, August 1, 2024 <https://www.vodafone.co.uk/newscentre/smart-living/everything-you-need-to-know-about/the-internet-of-things-everything-you-need-to-know/>
- Eric Bearton "IoT and AI in aviation: reducing downtime and enhancing performance," International Airport Review, July 31, 2024
<https://www.internationalairportreview.com/article/224540/iot-and-ai-in-aviation-reducing-downtime-and-enhancing-performance/>
- Mike Brennan, "The Future of Michigan Manufacturing: IoT and AI Driving Industry 4.0," MITECHNEWS.COM, July 31, 2024
<https://mitechnews.com/4ir/future-of-michigan-manufacturing-driving-industry-4-0/>

Selected IoT Perspectives Artificial Intelligence of Things (AIoT)

"IoT is seeing unusually intense new interest for a long-established technology, even one still experiencing market growth. A sure sign of this buzz is the appearance of acronyms, such as AIoT and GenAIoT, or "artificial intelligence of things" and "generative artificial intelligence of things." MIT Technology Review Insights in association with UBS, "Housetraining robot dogs: How generative AI might change consumer IoT," MIT Technology Review, July 10, 2024 <https://www.technologyreview.com/2024/07/10/1094477/housetraining-robot-dogs-how-generative-ai-might-change-consumer-iot/>

- IoT Mareketing posting, "The Emergence of AIoT in 2024: A Transformative Force in Digital Transformation," August 5, 2024
<https://iotmktg.com/the-emergence-of-aiot-in-2024-a-transformative-force-in-digital-transformation/>
- SkyQuest Technology press release, "Artificial Intelligence of Things (AIoT) Market: Edge Solutions and Embedded AI Set to Surpass USD 495.09 Billion by 2031," PR Newswire, July 10, 2024 <https://www.prnewswire.com/news-releases/artificial-intelligence-of-things-aiot-market-edge-solutions-and-embedded-ai-set-to-surpass-usd-495-09-billion-by-2031--skyquest-technology-302193233.html>
- Brian Bonson, "AIoT: Exploring the Intelligent Future," IoT for all, July 2, 2024 <https://www.iotforall.com/podcasts/e350-aiot-exploring-the-intelligent-future>
- Eurasia Academic Publishing Group, "Smarter eco-cities, AI and AI of Things, and environmental sustainability," Techxplore, February 2, 2024 <https://techxplore.com/news/2024-02-smarter-eco-cities-ai-environmental.html>

Research background info (sample): Chabel, Saàdia. "Artificial Intelligence of Things: Quick Sort Strategy for Medical Supply Chain," IEEE Transactions on Industrial Informatics (2024) <https://ieeexplore.ieee.org/abstract/document/10614746>; Villar, Eneko, Imanol Martín Toral, Isidro Calvo, Oscar Barambones, and Pablo Fernández-Bustamante, "Architectures for Industrial AIoT Applications," Sensors 24, no. 15 (published July 30, 2024): 4929 <https://www.mdpi.com/1424-8220/24/15/4929>; Xu, Hanyue, Kah Phooi Seng, Li Minn Ang, and Jeremy Smith. "Decentralized and Distributed Learning for AIoT: A Comprehensive Review, Emerging Challenges and Opportunities," IEEE Access (published July 2, 2024) <https://ieeexplore.ieee.org/abstract/document/10580879>; Awaisi, Kamran Sattar, Qiang Ye, and Srinivas Sampalli. "A Survey of Industrial AIoT: Opportunities, Challenges, and Directions," IEEE Access (published July 10, 2024) <https://ieeexplore.ieee.org/abstract/document/10591982>; Qi, Wen, Xiangmin Xu, Kun Qian, Björn W. Schuller, Giancarlo Fortino, and Andrea Aliverti, "A Review of AIoT-based Human Activity Recognition: From Application to Technique," IEEE Journal of Biomedical and Health Informatics (published May 29, 2024) <https://ieeexplore.ieee.org/abstract/document/10540657>; Gowda, V. Dankan, Mandeep Kaur, D. Srinivas, K. D. V. Prasad, and R. Shekhar. "AIoT Integration Advancements and Challenges in Smart Sensing Technologies for Smart Devices," In AIoT and Smart Sensing Technologies for Smart Devices, pp. 42-65. IGI Global, 2024 <https://www.igi-global.com/chapter/aiot-integration-advancements-and-challenges-in-smart-sensing-technologies-for-smart-devices/338653> ---- See Kinza Yasar, Alexander S. Gillis, and Gerry Christensen, "Definition - artificial intelligence of things (AIoT)," TechTarget, Last updated July 2023 <https://www.techtarget.com/iotagenda/definition/Artificial-Intelligence-of-Things-AIoT>; Third International Conference on Artificial Intelligence of Things (ICAIoT 2024) organized by Department of Computer Engineering, Istanbul Sabahattin Zaim University, Turkey on October 3-4, 2024 <https://icaiot.sci-conf.com/>; IEEE AIoT 2024 was held in Melbourne, Australia (July 24-26, 2024) <https://www.ieee-aiot.org/2024/>

<https://cdait.gatech.edu>



Georgia Tech • Center for Advanced Communications Policy

Center for the Development and Application
of Internet of Things Technologies

August 15, 2024