



CHRONICLE OF DIGITAL TRANSFORMATION THROUGH INTERNET OF THINGS TECHNOLOGIES

Some biweekly perspectives from around the globe gathered by CDAIT

(1250 entries since April 1, 2022)
https://cdait.gatech.edu/sites/default/files/2023-05/Digital_Transformation_Through_IoT_Technologies_May_15_2023.pdf

GOVERNANCE & THE INTERNET OF THING

Rebecca Klar, "After years of explosive growth, 5G's future is mired in politics," The Hill, May 9, 2023
<https://thehill.com/policy/telecom/future-of-broadband/3990480-5g-future-growth-mired-politics/>

Vignesh Santhanam, Piyush Gupta, and Vivek HP, "From innovation to integration: the role of collective action in institutionalizing 4IR technologies," World Economic Forum, May 8, 2023
<https://www.weforum.org/agenda/2023/05/the-power-of-collective-action-institutionalizing-4ir-technologies/>

Amber Hickman, "Supply chain managers must invest in AI, ML and IoT, find Frost & Sullivan," Technology Record, May 4, 2023
<https://www.technologyrecord.com/article/Supply-chain-managers-must-invest-in-AI-ML-and-IoT-find-Frost-Sullivan>

Luna Sun, "China's smart cities: 4 areas where AI, the IoT, big data and cloud computing are making a difference," South China Morning Post, May 1, 2023
https://www.scmp.com/economy/china-economy/article/3218514/chinas-smart-cities-4-areas-where-ai-iot-big-data-and-cloud-computing-are-making-a-difference?module=perpetual_scroll_o&pgtype=article&campaign=3218514

Assad Abbas, "The Intersection of AI and IoT: How Smart Cities are Transforming Urban Living," Techopedia, May 1, 2023
<https://www.techopedia.com/the-intersection-of-ai-and-iot-how-smart-cities-are-transforming-urban-living>

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Biweekly IoT News Digest (05/23 – 1)

IoT News and Market Reports

(First Half of May 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/2023-05/IoT_News_Filings_May_2023_First_Half.pdf
- Sample list of IoT-related market reports gathered by CDAIT – 80 entries: https://cdait.gatech.edu/sites/default/files/2023-05/IoT_Market_Reports_May_2023_First_Half.pdf

Georgia Tech IoT-related Info/Research Noticed by CDAIT

- Boone, Ashley, Carl Disalvo, and Christopher A. Le Dantec. "Data Practice for a Politics of Care: Food Assistance as a Site of Careful Data Work," In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems, pp. 1-13. Published April 19, 2023 <https://dl.acm.org/doi/abs/10.1145/3544548.3580831>
- Chang, Tianyu, and Gabriel A. Rincón-Mora. "Fast Energy-Harvesting TEG-Supplied Charging Regulator Microsystem," IEEE Transactions on Power Electronics (2023) <https://ieeexplore.ieee.org/abstract/document/10094003>
- Heidary, Roohollah, Jubilee Prasad Rao, and Olivia J. Pinon Fischer. "Smart Buildings in the IoT Era—Necessity, Challenges, and Opportunities," Handbook of Smart Energy Systems (2023): 1-21. https://link.springer.com/referenceworkentry/10.1007/978-3-030-72322-4_115-1

OF NOTE: Open for Public Comment: Draft NIST SP 1800-36, Vols. B–E, Trusted Internet of Things (IoT) Device Network-Layer Onboarding and Lifecycle Management (open through June 20, 2023) - See National Institute of Standards and Technology (NIST) press release dated May 3, 2023: <https://csrc.nist.gov/News/2023/draft-nist-sp-1800-36-vols-be-available-comment>

Special Reading Suggestions

- Desai, Roopa Ramesh and Kim, Jaehoon (2023) "Bibliographic and Text Analysis of Research on Implementation of the Internet of Things to Support Education," Journal of Information Systems Education: Vol. 34 : Iss. 2 , 179-195, published June 15, 2023: <https://aiselaisnet.org/jise/vol34/iss2/6>
- Zaveria, "What Role Do NFTs and Metaverse Play in IoT?" Analytics Insight May 10, 2023 <https://www.analyticsinsight.net/what-role-do-nfts-and-metaverse-play-in-iot/>
- Jonas Björklund, "How operators can balance the cost of IoT with profitability (Reader Forum)," RCR Wireless, May 9, 2023 <https://www.rcrwireless.com/20230509/internet-of-things-4/how-operators-can-balance-the-cost-of-iot-with-profitability-reader-forum#>
- Melita.io, "IoT Technology Leads to Lower Car Insurance Premiums and Safer Roads," IoT for All, May 8, 2023 <https://www.iotforall.com/iot-technology-leads-to-lower-car-insurance-premiums-and-safer-roads>
- Tate Ryan-Mosley, "How to hack a smart fridge - Your smart home devices know more about you than you might think—and they're less secure than you'd hope," MIT Technology Review, May 8, 2023 <https://www.technologyreview.com/2023/05/08/1072708/hack-smart-fridge-digital-forensics/>
- Nick Farrell, "Smart home market growing," Fudzilla, May 3, 2023 <https://www.fudzilla.com/news/iot/56821-smart-home-market-growing>
- Adam Turner, "Asset management and supply chains boosted by Massive IoT boom," Financial Review, May 2, 2023 <https://www.afr.com/work-and-careers/management/asset-management-and-supply-chains-boosted-by-massive-iot-boom-20230418-p5d1dc>

Selected IoT Perspectives

Automotive IoT

"To stay ahead in this competitive industry and meet customers' expectations, automobile companies are increasingly utilizing the power of automotive IoT (Internet of Things). The term refers to a complex chain of devices, such as cameras, sensors, GPS trackers, etc., connected to the cloud and providing real-time data, assisting in the effective optimization of the car manufacturing process. Also, automotive IoT facilitates advanced vehicle management capabilities, improved transportation efficiency, and a superior driving experience, defining the future vision of autonomous vehicles."
 Sudeep Srivastava, "Automotive IoT: Benefits, Applications, and Real Examples," Appinventiv, April 24, 2023
<https://appinventiv.com/blog/benefits-of-iot-in-automotive-industry/>

- GlobalData, "Who's saying what? Internet of Things mentions in company filings of automotive industry increased by 61% in Q1 2023," JustAuto, May 8, 2023 <https://www.just-auto.com/dashboard/filings/internet-of-things-mentions-automotive-industry/>
- Evolve Business Intelligence press release, "Driving into the Future: Global Automotive IoT Market accounts for USD 82.9 Billion in 2022 with a 25.2% CAGR from 2023-2033," Digital Journal, May 4, 2023 <https://www.digitaljournal.com/pr/news/xherald/driving-into-the-future-global-automotive-iot-market-accounts-for-usd-82-9-billion-in-2022-with-a-25-2-cagr-from-2023-2033>
- Sumit Chauhan, "How AI, Edge Computing, IoT and The Cloud are Drastically Reshaping Vehicle Fleet Management For Telecom Companies," Telecom reseller, May 1, 2023 <https://telecomreseller.com/2023/05/01/how-ai-edge-computing-iot-and-the-cloud-are-dramatically-reshaping-vehicle-fleet-management-for-telecom-companies/>
- Jenn Mullen, "The Drive To Disrupt: How Digital Twins Are Fueling Automotive Innovation," Semiconductor Engineering, April 27, 2023 <https://semiengineering.com/the-drive-to-disrupt-how-digital-twins-are-fueling-automotive-innovation/>
- Sponsored content by igus, "Connected Cars: Driving the automotive industry forward," The Robot Report, March 1, 2023 <https://www.therobotreport.com/connected-cars-driving-the-automotive-industry-forward/>

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