

## GT CDAIT Biweekly IoT News Digest (04/23 – 2)

# CHRONICLE OF DIGITAL TRANSFORMATION THROUGH INTERNET OF THINGS TECHNOLOGIES

Some biweekly perspectives from around the globe gathered by CDAIT

(1200 entries since April 1, 2022) https://cdait.gatech.edu/sites/default /files/2023-04/Digital\_Transformation\_Through\_ IoT\_Technologies\_April\_30\_2023.pdf

## GOVERNANCE & THE INTERNET OF THING

IoTHub staff writer, "'Top down' approach to digital infrastructure taking shape in Australia," IoT Hub, April 28, 2023

https://www.iothub.com.au/news top-down-approach-to-digitalinfrastructure-taking-shape-inaustralia-593796

Jessica Davis, "[U.S.] National cybersecurity labeling program expected in May for IoT devices," SC Magazine, April 25, 2023

https://www.scmagazine.com/nevs/device-security/national-cybersecurity-labeling-program-expected-may-iot-devices

Techfunnel Author, "Earth Day: Using IoT to Further Your Environmental, Social, and Governance Goals," Techfunnel, April 24, 2023 https://www.techfunnel.com/infor

CIO News Desk, "US drawing up plans for use of 6G networks," CIO News, April 24, 2023 https://cionews.co.in/us-drawingup-plans-for-use-of-6g-networks/

OrissaPOST posting, "In a 1st, IoT device to check tax evasion in Joda [State of Odisha, India] mines," OrissaPOST, April 20, 2023 https://www.orissapost.com/in-a-1st-iot-device-to-check-taxevasion-in-joda-mines/

Henk H.F. Smid, "Internet of Things: the China perspective," The Space Review, April 17, 2023 https://www.thespacereview.co m/article/4566/1

#### **IoT News and Market Reports**

(Second Half of April 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/2023-04/IoT\_News\_Filings\_April\_2023\_\_Second\_Half.pdf
- Sample list of IoT-related market reports gathered by CDAIT 80 entries: https://cdait.gatech.edu/sites/default/files/2023-04/IoT\_Market\_Reports\_April\_2023\_Second\_Half.pdf

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

- CDAIT Researchers active at American Society on Aging (ASA) Conference, GT CACP Website, April 13, 2023 https://cacp.gatech.edu/news/item/667334/cdait-researchers-active-american-society-aging-conference
- Liu, Yifan, Azell Francis, Catharina Hollauer, M. Cade Lawson, Omar Shaikh, Ashley Cotsman, Khushi Bhardwaj et al. "Reliability of electric vehicle charging infrastructure: A cross-lingual deep learning approach," Communications in Transportation Research 3 (available online, April 18, 2023): 100095 https://www.sciencedirect.com/science/article/pii/S2772424723000069

OF NOTE: --Arnold Vogt, "Game over for industrial IoT platforms; generative AI and industrial metaverse on the rise – insights from Hannover Messe 2023 [April 17-21, 2023, Hannover, Germany]." Sitsi, April 25, 2023 https://www.sitsi.com/game-over-industrial-iot-platforms-generative-ai-and-industrial-metaverse-rise-insights-hannover; Scarlett Evans, "Zero Trust and AI: The Future of IoT Cybersecurity, Hannover 2023," IoT World Today, April 19, 2023 https://www.iotworldtoday.com/security/zero-trust-and-ai-the-future-of-iot-cybersecurity-hannover-2023; Alice Chambers, "Hannover Messe 2023: using IoT to optimise operations," Technology Record, April 19, 2023 https://www.technologyrecord.com/article/hannover-messe-2023-using-iot-to-optimise-operations

#### **Special Reading Suggestions**

- Matt Hatton, "The big shake-up in the cellular IoT platform market (Reader Forum)," RC Wireless, April 27, 2023 https://www.rcrwireless.com/20230427/internet-of-things-4/the-big-shake-up-in-the-cellular-iot-platform-market-reader-forum
- Zac Amos, "How to Conduct IoT Penetration Testing," IoT for All, April 25, 2023 https://www.iotforall.com/how-to-conduct-iot-penetration-testing
- Emily Newston, "IoT Mechatronics Give a Huge Boost to These 5 Industries," IoT for all, April 24, 2023 https://www.iotforall.com/iot-mechatronics-gives-a-huge-boost-to-these-5-industries
- Tammy Waitt, "The Current State of Wireless (In)security, by Bastille CTO," American Security Today, April 23, 2023 https://americansecuritytoday.com/the-current-state-of-wireless-insecurity-by-bastille-cto/
- Satyajit Sinha, "10 notable telco IoT trends—based on insights gathered in Q1 2023," IoT Analytics, April 19, 2023 https://iot-analytics.com/top-10-telco-iot-trends/
- Markus Law, "Cybersecurity no longer 'one size fits all' in an IoT world," Technology Magazine, April 17, 2023 https://technologymagazine.com/articles/cybersecurity-no-longer-one-size-fits-all-in-an-iot-world
- Nitisha Dubey, "4 Ways to Enhance IoT Battery Performance Using Emulation Software," BIS Infotech, April 17, 2023 https://www.bisinfotech.com/4-ways-to-enhance-iot-battery-performance-using-emulation-software/

### **Selected IoT Perspectives**

#### The Internet of Things and the Smart Home

"The market for IoT smart homes is expected to experience significant growth, reaching a value of USD 417 billion by 2030 with a compound annual growth rate (CAGR) of 31.91% during the forecast period (2022-2030). This growth is being fueled by several factors, including the increasing adoption of smart home devices, rising demand for home automation, advancements in connectivity technology, and growing awareness of energy efficiency, SkyQuest Technology Consulting Put. Lid press release, "IOT Smart Home Market: Transforming the Modern Home and Revolutionizing Living." Globe Newswire, April 4, 2023 https://www.globenewswire.com/news-release/2023/04/04/2640688/0/en/IOT-Smart-Home-Market-Transforming-the-Modern-Home-and-Revolutionizing-Living.html

- AWE press release, "AWE {Appliance & Electronics World Expo] 2023 [Shanghai, China, April 27-30, 2023] opens with prospect into smart home," https://www.prnewswire.com/news-releases/awe2023-opens-with-prospect-into-smart-home-301809658.html
- Silviu Stahi, "A smart device in your home is extremely unsafe, Bitdefender IoT report finds," iTWire, April 26, 2023 https://itwire.com/guest-articles/guest-opinion/a-smart-device-in-your-home-is-extremely-unsafe,-bitdefender-iot-report-finds.html
- Stacey Higginbotham, "Podcast: Why is the smart home still so terrible?" Stacey on IoT, April 13, 2023 https://staceyoniot.com/podcast-why-is-the-smart-home-still-so-terrible/
- Jay Basen, "Hands on with the Matter Smart Home Protocol," Restechtoday, April 13, 2023 https://restechtoday.com/hands-on-with-the-

Research background info (sample): Orfanos, Vasilios A., Stavros D. Kaminaris, Panagiotis Papageorgas, Dimitrios Piromalis, and Dionisis Kandris, "A Comprehensive Review of IoT Networking Technologies for Smart Home Automation Applications," Journal of Sensor and Actuator Networks 12, no. 2 (published April 3, 2023): 30 https://www.mdpi.com/2224-2708/12/2/30; Alsamarah, Osaid, Khaled A. Alshare, and Peggy L. Lane. "Determinants of individual's intention to use the internet of things for smart home technology: a cultural moderating effect," International Journal of Mobile Communications 21, no. 3 (online February 1,2023): 316-340

https://www.inderscienceonline.com/doi/abs/10.1504/IJMC.2023.129980?journalCode=ijmc; Pramajuri, Baltra Agusti, Syaddam Syaddam, Try Hadyanto, and Margret Ade Cipta Rahmani. "Literature review: smart home based on IoT for security system," Jurnal Teknologi dan Sistem Tertanam 4, no. 1 (2023) https://ejurnal.teknokrat.ac.id/index.php/jitst/article/view/2304; Buil-Gil, David, Steven Kemp, Stefanie Kuenzel, Lynne Coventry, Sameh Zakhary, Daniel Tilley, and James Nicholson. "The digital harms of smart home devices: A systematic literature review," Computers in Human Behavior (August 2023): 107770 https://www.sciencedirect.com/science/article/pii/S0747563223001218; Wang, Yujie, Canzhou Chen, and Wenjing Zhang. "Design of Smart Home Control System Based on Internet of Things," In 2023 IEEE 6th Information Technology, Networking, Electronic and Automation Control Conference (ITNEC), vol. 6, pp. 1680-1683. IEEE, Added to IEEE Xplore March 2023 https://ieeexplore.ieee.org/abstract/document/10082440; Unaldi, Sibel, Nesibe Yalcin, and Enes Elci. "An IoT-based Smart Home Application with Barrier-Free Stairs for Disabled/Elderly People," Elektronika ir Elektrotechnika 29, no. 1 (February 27, 2023): 15-20 https://www.eejournal.ktu.lt/index.php/elt/article/view/30731; Yudidharma, Arya, Nicholas Nathaniel, Tang Nyquel Gimli, Said Achmad, and Aditya Kurniawan. "A systematic literature review: Messaging protocols and electronic platforms used in the internet of things for the purpose of building smart homes," Procedia Computer Science 216 (2023): 194-203 https://www.sciencedirect.com/science/article/pii/S1877050922022050; Malik, Indu, Arpit Bhardwaj, Harshit Bhardwaj, and Aditi Sakalle. "IoT-Enabled Smart Homes: Architecture, Challenges, and Issues," Revolutionizing Industrial Automation Through the Convergence of Artificial Intelligence and the Internet of Things (2023): 160-176 https://www.igi-global.com/chapter/iot-enabled-smart-homes/313101



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