

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

CHRONICLE OF DIGITAL TRANSFORMATION THROUGH INTERNET OF THINGS TECHNOLOGIES

TECHNOLOGIES

Some biweekly perspectives from around the globe gathered by CDAIT (2500 entries since April 1, 2022) https://cdait.gatech.edu/sites/default /files/2024-05/Digital_Transformation_Through_ IoT_Technologies_May_31_2024.pdf

GOVERNANCE & THE INTERNET OF THING

Shin Gill, "The Power of Strategic IoT Partnerships," IoT for all, May 24, 2024 https://www.iotforall.com/unlocking-iot-growth-the-power-of-strategic-partnerships

Protections for Equipment Program,"
FCC, May 23, 2024
https://www.fcc.gov/document/fccproposes-national-securityprotections-equipment-program-0

Nicholas Jones, "IoT Advancements in Industry 5.0: Bridging the Gap Between Humans and Machines,"Embedded Computing, **May**

23, 2024
https://embeddedcomputing.com/appl
ication/industrial/industrial-iot/iotadvancements-in-industry-50bridging-the-gap-between-humansand-machines

Jessica Rengstorf, "5 Considerations for Managing Data in the Internet of Medical Things (IoMT) Era," Healthcare IT Today, May 20, 2024 https://www.healthcareittoday.com/2 024/05/20/5-considerations-for-managing-data-in-the-internet-of-medical-things-iomt-era/

Antoinette Hodes, "How the Internet of Things (IoT) became a dark web target – and what to do about it," World Economic Forum, May 17, 2024 https://www.weforum.org/agenda/202 4/05/internet-of-things-dark-web-strategy-supply-value-chain/

Chris Pierson, "IoT Vulnerabilities and BotNet Infections: A Risk for Executives," Security Boulevard, May

05/iot-vulnerabilities-and-botnet infections-a-risk-for-executives/

Cabe Atwell, "IoT Laws Aim to Protect User Information and Mitigate Cybersecurity Threats,"
Electronic Design, May 16, 2024
https://www.electronicdesign.com/tec
hnologies/communications/iot/article
/55040245/electronic-design-a-guideto-global-iot-regulation-

GT CDAIT Biweekly IoT News Digest (5/24 - 2)

IoT News and Market Reports

(Second Half of May 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 - 16 entries:
- https://cdait.gatech.edu/sites/default/files/2024-05/IoT_News_Filings_May_2024_Second_Half.pdf
- Sample list of IoT-related market reports gathered by CDAIT 65 entries: https://cdait.gatech.edu/sites/default/files/2024-05/IoT_Market_Reports_May_2024_Second_Half.pdf

Georgia Tech IoT-related Info/Research Noticed by CDAIT

- Liu, Chao, Rui Gu, Jiahong Yang, Lin Luo, Mingxia Chen, Yao Xiong, Ziwei Huo et al. "A Self-Powered Dual Ratchet Angle Sensing System for Digital Twins and Smart Healthcare,' Advanced Functional Materials (2024): 2405104 https://onlinelibrary.wiley.com/doi/abs/10.1002/adfm.202405104
- Halm, Matthew, and Chris Ingraham, "Asignifying Animacies in the Home," TOPIA: Canadian Journal of Cultural Studies 48 (2024): 93-110 https://www.utpjournals.press/doi/abs/10.3138/topia-2023-0034
- Lauren Zhou, Matthew Guess, Ka Ram Kim, and Woon-Hong Yeo "Skininterfacing wearable biosensors for smart health monitoring of infants and neonates," Communicatins Materials 5, 72 (published May 9, 2024). https://doi.org/10.1038/s43246-024-00511-6

OF NOTE: Oktay Demir, "How global AI interest is boosting the data management market," IoT Analytics (Hamburg, Germany), May 28, 2024 https://iot-analytics.com/how-global-ai-interest-is-boosting-data-management-market/ --- "The bigger picture: No AI strategy without a data strategy" -- "Data sources are the foundation for AI" - "Sources encompass diverse data formats from multiple repositories. Data sources may include enterprise systems such as enterprise resource planning (ERP) or customer relationship management (CRM), IoT data, coming from devices such as programmable logic controllers (PLCs) or sensors, or other external data, such as social media or governmental data.'

Special Reading Suggestions

- Alex Passett, "Great News for IoT: T-Mobile to Officially Acquire UScellular in \$4.4B Deal," IoT Evolution, May 28, 2024 https://www.iotevolutionworld.com/iot/articles/459684-great-news-iot-t-mobile-officially-acquire-uscellular.htm
- Zachary Comeau, "Inside the New UK Law to Improve IoT Cybersecurity," CE Pro, May 28, 2024 https://www.cepro.com/networking/ukcybersecurity-law-to-improve-iot-smart-device-default-passwords/
- Ross Sabolcik, "Unleashing the potential of industrial and commercial IoT," May 22, 2024 https://www.edn.com/unleashing-the-potential-ofindustrial-and-commercial-iot/
- Daminan Lewis, "How satellite-enabled IoT can help operators get clarity on supply chains," Offshore Technology, May 20, 2024 https://www.offshore-technology.com/comment/how-satellite-enabled-iot-can-help-operators-get-clarity-on-supply-chains/?cf-view
- Staff Writer, "IoT and AI data revolution: 40+ experts to lay out how organisations can accelerate productivity and sustainability at IoT Impact in Sydney," IoT Hub, May 17, 2024 https://www.iothub.com.au/news/iot-and-ai-data-revolution-40-experts-to-lay-out-how-organisations-canaccelerate-productivity-and-sustainability-at-iot-impact-in-sydney-608042
- Ohad Perry, "How Ambient IoT Enables Real-Time Visibility for Retailers," Supply Chain Brain, May 16, 2024 https://www.supplychainbrain.com/blogs/1-think-tank/post/39547-how-ambient-iot-enables-real-time-visibility-for-retailers
- Duncan MacRae, "Jason Mann, SAS: How IoT is shaping the world for the better," IoT News, May 16, 2024 https://www.iottechnews.com/news/2024/may/16/jason-mann-sas-how-iot-is-shaping-the-world-for-the-better/

Selected IoT Perspectives IoT and Safety (in various contexts)

"IoT-enabled sensors play a vital role in building safety. These sensors detect various environmental factors, such as temperature, humidity, and air quality, ensuring a safe and comfortable environment. IoT facilitates real-time monitoring and data collection, providing valuable insights for preventive measures. For instance, sensors can detect gas leaks, enabling immediate and effective action to prevent disasters." Jenks2026, "The Role of IoT in Ensuring Building Safety," Green.org, updated February 21, 2024 https://green.org/2024/01/30/the-role-of-iot-in-ensuring-building-safety/

- IEEE/ACM SafeThings 2024: The 8th IEEE/ACM Workshop on the Internet of Safe Things (May 23, 2024, San Francisco) https://safe-things-2024.github.io/
- Construction Business Review posting, "How Do IoT-monitored Scaffold Systems Improve Safety," Construction Business Review, May 23, 2024 https://www.constructionbusinessreview.com/news/how-do-iotmonitored-scaffold-systems-improve-safety-nwid-1581.html
- FinSMES posting, "Public Safety Initiatives and the Internet of Things," FinSMES, May 9, 2024 https://www.finsmes.com/2024/05/public-safety-initiatives-and-the-internet-of-things.html
- Radojka Baricki, "Harnessing the Internet of Things (IoT) for Enhanced Food Safety: A Revolution in Monitoring and Compliance," FoodReady, May 2, 2024 https://foodready.ai/blog/internet-of-things-iot-food-safety/

Research background info (sample): Ahn, Jae-Kwang, Tae-Hyun Kim, and Hyounhee Koo. "Design for Optimized Public Safety and Earthquake Disaster Mitigation With IoT," IEEE Access 12 (2024): 43485-43494 https://ieeexplore.ieee.org/abstract/document/1047 Ihirwe, Felicien, Davide Di Ruscio, Katia Di Blasio, Simone Gianfranceschi, and Alfonso Pierantonio, "Supporting model-based safety analysis for safety-critical IoT systems," Journal of Computer Languages 78 (2024): 101243

www.sciencedirect.com/science/article/abs/pii/S2590118423000539; Brown, Andi, Diarmaid Harkin, and Leonie Maria Tanczer,

"Safeguarding the "Internet of Things" for Victim-Survivors of Domestic and Family Violence: Anticipating Exploitative Use and Encouraging Safety-by-Design," Violence against women (2024): 10778012231222486

.com/doi/full/10.1177/10778012231222486; Kim, Jaehwan, Sangki Park, and Dong-Woo Seo, "Application of a Smart IoT (Internet of Things) Platform Providing Traffic Safety Information for Marine Bridges Under Strong Winds," Journal of Coastal Research 116, no. SI (2024): 166-170 https://meridian.allenpress.com/jcr/article/116/SI/166/498362; Abass, Temilade, Michael Alurame Eruaga, Esther Oleiye Itua, and James Tabat Bature, "Advancing food safety through IoT: real-time monitoring and control systems," International Medical Science Research Journal 4, no. 3 (2024): 276-283 https://fepbl.com/index.php/imsrj/article/view/919; Natalia Shchepkina, Gaurav Singh Negi, Lalit Bhalla, Richa Nangia, Jyoti and P. Surekha,, "IoT-Enhanced Public Safety in Smart Environments: A Comparative Analysis Using the Public Safety IoT Test," BIO Web Conf., 86 (2024) 01100 https://www.bio-

 $conferences.org/articles/bioconf/abs/2024/o5/bioconf_rtbs2024_o1100/bioconf_rtbs20200/bioconf_rtbs20200/bioconf_rtbs20200/bioconf_rtbs20200/bioconf_rtbs20200/bioconf_rtbs20200/bioconf_rtbs20200/bioconf_rtbs20200/bioconf_rtbs20200/bioconf_rtbs20200/bi$



Georgia Tech • Center for Advanced Communications Policy Center for the Development and Application

of Internet of Things Technologies