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Biweekly IoT News Digest (02/23 – 1)

CHRONICLE OF DIGITAL TRANSFORMATION THROUGH INTERNET OF THINGS TECHNOLOGIES

Some biweekly perspectives from around the globe gathered by CDAIT (950 entries since April 1, 2022) https://cdait.gatech.edu/sites/default/files/2023-02/Digital_Transformation_Through_IoT_Technologies_February_15_2023.pdf

GOVERNANCE & THE INTERNET OF THINGS

Bi Ran, "Internet of Things: Convention opens in Beijing with calls for global cooperation and more innovation," CGTN, February 11, 2023 <https://news.cgtn.com/news/2023-02-11/VHJhbnNjcmllwDcwNTA4/index.html>

Ken Mills, "Smart Communities Need An Integrated IoT Strategy," Forbes, February 10, 2023 <https://www.forbes.com/sites/forbestechcouncil/2023/02/10/smart-communities-need-an-integrated-iot-strategy/?sh=36b8d16965e0>

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Kartik Raman, "How data governance and security is transforming shop floor operations in manufacturing," The Manufacturer, February 7, 2023 <https://www.themanufacturer.com/articles/how-data-governance-and-security-is-transforming-shop-floor-operations-in-manufacturing/>

Goodwin, "EU Technology Regulation: Watch List for 2023 and Beyond," JD Supra, February 7, 2023 <https://www.jdsupra.com/legalnews/eu-technology-regulation-watch-list-for-4123803/>

Robert Ackerman Jr. "What's in the Cards for Cybersecurity in 2023?," Tripwire, February 6, 2023 <https://www.tripwire.com/state-of-security/whats-cards-cybersecurity>

Jonathan Reed, "The White House on Quantum Encryption and IoT Labels," Security Intelligence, February 1, 2023 <https://securityintelligence.com/news/white-house-on-quantum-encryption-iot-labels/>

Matthew Margetts, "How Can IoT Improve the Lives of the Elderly and Vulnerable?," Digit, January 30, 2023 <https://www.digit.fyi/how-can-iot-improve-the-lives-of-the-elderly-and-vulnerable/>

IoT News and Market Reports

(First Half of February 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 - See: https://cdait.gatech.edu/sites/default/files/2023-02/IoT_News_Filings_February_2023_First_Half.pdf
- Sample list of **IoT-related market reports** gathered by CDAIT– 84 entries – See: https://cdait.gatech.edu/sites/default/files/2023-02/IoT_Market_Reports_February_2023_First_Half.pdf

Georgia Tech IoT-related Info/Research Noticed by CDAIT

- J Knight, Thora, Xiaojun Yuan, DeeDee Bennett Gayle, and Salimah LaForce. "Responding to COVID-19: Privacy Implications of the Rapid Adoption of ICTs," In Social Vulnerability to COVID-19: Impacts of Technology Adoption and Information Behavior, pp. 107-126. Cham: Springer International Publishing, 2023 https://link.springer.com/chapter/10.1007/978-3-031-06897-3_7
- Liu, Shijie, Xi Liang, Pengfei Chen, Hairong Long, Tao Jiang, and Zhong Lin Wang. "Multilayered Helical Spherical Triboelectric Nanogenerator with Charge Shuttling for Water Wave Energy Harvesting," Small Methods (2023): 2201392. <https://onlinelibrary.wiley.com/doi/abs/10.1002/smt.202201392>
- Wong, Richmond Y., Andrew Chong, and R. Cooper Aspegren. "Privacy Legislation as Business Risks: How GDPR [EU's General Data Protection Regulation] and CCPA [California Consumer Privacy Act] are Represented in Technology Companies' Investment Risk Disclosures." Proceedings of the ACM on Human-Computer Interaction 7, no. CSCW1 (April 2023) <https://escholarship.org/content/qt9mh2h52k/qt9mh2h52k.pdf>

OF NOTE: Fira de Barcelona press release, "IoT Solutions World Congress [Barcelona, Spain] closes a successful 2023 edition and outlines the future of an efficient and sustainable industry 5.0," Globe Newswire, February 2, 2023 <https://www.globenewswire.com/news-release/2023/02/02/2600791/0/en/IoT-Solutions-World-Congress-closes-a-successful-2023-edition-and-outlines-the-future-of-an-efficient-and-sustainable-industry-5-0.html> --- Ali Asad Sabir and Waleed Mehmood "The ChatGPT craze: are we ready to take a back seat to AI?" Tribune Magazine, February 5, 2023 <https://tribune.com.pk/story/2399500/the-chatgpt-craze-are-we-ready-to-take-a-back-seat-to-ai>

Special Reading Suggestions

- IoT Business News posting, "4 Reasons Why Penetration Testing Is Crucial For IT and IoT Systems," IoT Business News, February 13, 2023 <https://iotbusinessnews.com/2023/02/13/84062-4-reasons-why-penetration-testing-is-crucial-for-it-and-iot-systems/>
- Allan Tan, "Supercharging IoT with edge computing," FutrueIoT, February 10, 2023 <https://futureiot.tech/supercharging-iot-with-edge-computing/>
- Shannon Williams, "Global IoT market size set to grow 19% in 2023 - report," IT Brief (Australia), February 9, 2023 <https://itbrief.com.au/story/global-iot-market-size-set-to-grow-19-in-2023-report>
- GlobalData, "IoT innovation: Leading companies in ingestible sensors for the medical devices industry," Medical Device Network, February 6, 2023 <https://www.medicaldevice-network.com/data-insights/innovators-iot-indigestible-sensors-medical-devices/>
- Katherine Latham, "How we fell out of love with voice assistants," BBC, February 3, 2023 <https://www.bbc.com/news/business-64371426>
- John Koon, "Solving Problems With The IoT," Semiconductor Engineering, February 2, 2023 <https://semiengineering.com/solving-problems-with-the-iot/>
- Sean Birell and Carter Hofmann, "To agriculture and beyond: a look at how IoT technology is transcending industry silos," Trade Finance Global, January 31, 2023 <https://www.tradefinanceglobal.com/posts/agriculture-beyond-iot-technology-transcending-industry-silos/>

Selected IoT Perspectives The Connection Between IoT and DevOps

"IoT and DevOps are the latest additions to the information technology sector. DevOps is the combination of 'Development and Operations' while IoT represents the 'Internet of Things'. DevOps is a complete software delivery procedure that emphasizes the collaboration between operations and developers' team. It includes product lifecycle management, developing operations and software professionals."

Gourav Sharma, "What is the Connection Between IoT and DevOps?," Mileweb, September 14, 2021 <https://www.mileweb.com/blog/technology-hub/what-is-the-connection-between-iot-and-devops/>

- Zaveria, "The top scripting languages useful for DevOps professionals are enlisted in this article," Analytics Insight, January 26, 2023 <https://www.analyticsinsight.net/top-10-scripting-languages-useful-for-devops-professionals-in-2023/>
- Nikhil Sonawane, "DevOps and Industrial Internet of Things (IIoT)," Enterprise Talk, October 31, 2022 <https://enterprisetalk.com/featured/devops-and-industrial-internet-of-things-iiot/>
- Linda Rosencrance, "Assessing the Advantages of DevOps For IoT Performance Testing," IoT World Today, July 6, 2021 <https://www.iotworldtoday.com/iiot/assessing-the-advantages-of-devops-for-iot-performance-testing>
- Daive 'CoderDave' Benvegñù, "DevOps and IoT: Better TOGETHER!" Dev.to, January 12, 2021 <https://dev.to/n3wrt0n/devops-and-iot-better-together-pd8>
- Marija Naumovska, "DevOps for Industrial IoT — Why and How?," Microtica, December 21, 2020 <https://www.microtica.com/blog/devops-for-industrial-iot-why-and-how>
- Crystal Bedell, "DevOps Automation: Why It's a Necessity for IoT," IoT World Today, September 17, 2019 <https://www.iotworldtoday.com/connectivity/devops-automation-why-it-s-a-necessity-for-iot>

Research background info (sample): Bijwe, Awantika, and Poorna Shankar, "Challenges of Adopting DevOps Culture on the Internet of Things Applications-A Solution Model," In 2022 2nd International Conference on Technological Advancements in Computational Sciences (ICTACS), pp. 638-645. IEEE, online December 28, 2022 <https://ieeexplore.ieee.org/abstract/document/9988182>; Fritzsche, Jonas, Justus Bogner, Markus Haug, Ana Cristina Franco da Silva, Carolin Rubner, Matthias Saft, Horst Sauer, and Stefan Wagner. "Adopting microservices and DevOps in the cyber-physical systems domain: A rapid review and case study." Software: Practice and Experience (online November 18,2022) <https://onlinelibrary.wiley.com/doi/full/10.1002/spe.3169>; Bijwe, Awantika, and Poorna Shankar. "Analysis of factors that improve reliability and effectiveness of DevOps culture in developing connected devices," Available at SSRN 4091401 (online April 23,2022) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4091401; Hagar, Jon Duncan. "Test Approaches and Quality Assessments for IoT Agile/DevOps," In IoT System Testing: An IoT Journey from Devices to Analytics and the Edge, pp. 179-186. Berkeley, CA: Apress, online September 17,2022 https://link.springer.com/chapter/10.1007/978-1-4842-8276-2_12;