GT CDAIT
Biweekly IoT News Digest (02/25 – 1)

*Digest is compiled by Alain Louchez,
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GOVERNANCE & THE INTERNET OF THINGS

Lynn Greiner, "**Spy vs spy: Security agencies help secure the network edge**," [re. Five Eyes Alliance] Network World, February 6, 2025 https://www.networkworld.com/article/3818577/spy-vs-spy-security-agencies-help-secure-the-network-edge.html

Myles Suer, "**The State of Data Governance**," The Data Administration Newsletter, February 5, 2025 https://tdan.com/the-state-of-data-governance/32403

Scharon Harding, "**Many Americans still don't understand how easily IoT devices can get bricked**," Ars Technica, February 5, 2025 https://arstechnica.com/gadgets/2025/02/many-americans-still-dont-understand-how-easily-iot-devices-can-get-bricked/

Enescan Lorci, "**Shaping the Digital Order: China's Role in Technology Standards and the Implications for Taiwan**," Global Taiwan Institute, February 5, 2025 https://globaltaiwan.org/2025/02/shaping-the-digital-order-chinas-role-in-technology-standards-and-the-implications-for-taiwan/

Sean Tufts, "**Will The 'U.S. Cyber Trust Mark' Transform IoT Security?**" IoT World Today, February 4, 2025 https://www.iotworldtoday.com/cybersecurity/will-the-u-s-cyber-trust-mark-transform-iot-security-

Stephen M. Saunders MBE, "**Op-Ed: We need 6G for the trillion-device network**," Fierce Network, February 3, 2025 https://www.fierce-network.com/wireless/op-ed-we-need-6g-trillion-device-network

Randolph Clark and Junaid Islam, "**Zero Trust Data Is Key To Unlocking IoT's Potential**," AFCEA International [formerly known as the Armed Forces Communications and Electronics Association], February 1, 2025 https://www.afcea.org/signal-media/cyber-edge/zero-trust-data-key-unlocking-iots-potential

IoT News and Market Reports

(First Half of February 2025)

- 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/2025-02/IoT_News_Filings_February_2025_First_Half.pdf

- Sample list of IoT-related market reports gathered by CDAIT – 50 entries: https://cdait.gatech.edu/sites/default/files/2025-02/IoT_Market_Reports_February_2025_First_Half.pdf

Georgia Tech IoT-related Info/Research Noticed by CDAIT

- Zhang, Maoyi, Chaosheng Hu, Tongtong Zhang, Chris R. Bowen, Rui Li, YongAn Huang, Yewang Su, Zhong Lin Wang, and Ya Yang, "**Over 200 times current enhancement via buckling triboelectric nanogenerator at ultra-low speed for monitoring the swelling of lithium ion batteries**," Science Bulletin 70, no. 2 (2025): 148-152 http://www.wanggenerator.com/paper/2025/1-s2.0-S2095927324007539-main.pdf

- Birbasov, Nikita S., Paul Wang, Selcuk Cimtalay, Olivia J. Pinon-Fischer, Michael G. Balchanos, and Dimitri Mavris, "**A Modeling and Simulation Environment for the Quantitative Assessment of Operational and Technological Improvements in Military Logistics**," In AIAA SCITECH 2025 Forum, p. 0708, published online January 3, 2025 https://arc.aiaa.org/doi/abs/10.2514/6.2025-0708

- Reichman, Benjamin, Xiaofan Yu, Lanxiang Hu, Jack Truxal, Atishay Jain, Rushil Chandrupatla, Tajana Šimunić Rosing, and Larry Heck, "**SensorQA: A Question Answering Benchmark for Daily-Life Monitoring**," arXiv preprint arXiv:2501.04974 (published January 10,2025) https://arxiv.org/abs/2501.04974

OF NOTE: Justina-Alexandra Sava, " **The 9 most demanded IoT system integration services**," IoT Analytics, January 29, 2025 https://iot-analytics.com/most-demanded-iot-system-integration-services/ ---- Jeremiah Fowler, "**2.7 Billion Records Exposed in IoT Devices Data Breach**," vpnMentor, February 12, 2025 https://www.vpnmentor.com/news/report-marshydro-breach/

Special Reading Suggestions

- Rob Alexander, "**Revolutionising Indian Homes: The Impact of the Matter Protocol on IoT Devices**," TimesTech [India], February 13, 2025 https://timestech.in/revolutionising-indian-homes-the-impact-of-the-matter-protocol-on-iot-devices/

- Ron Totton, "**The State of IoT: Transformative Momentum and What Lies Ahead**," The Fast Mode, February 11, 2025 https://www.thefastmode.com/expert-opinion/39537-the-state-of-iot-transformative-momentum-and-what-lies-ahead

- Pritesh Patel, "**IoT in Manufacturing: Use Cases, Benefits, and Challenges**," Embedded Computing Design, February 10, 2025 https://embeddedcomputing.com/technology/iot/data-analytics/iot-in-manufacturing-use-cases-benefits-and-challenges

- Byron V. Acohido, "**MY TAKE: Securing the Internet of Everything: why self-healing devices are the next frontier**," Security Boulevard, February 10, 2025 https://securityboulevard.com/2025/02/my-take-securing-the-internet-of-everything-why-self-healing-devices-are-the-next-frontier/

- Kumud Das, "**Blockchain, IoT Will Transform Industries In 2025 And Beyond, Predicts TechChefz Digital CEO**," Bizz Buzz, February 6, 2025 https://www.bizzbuzz.news/bizz-talk/blockchain-iot-will-transform-industries-in-2025-and-beyond-predicts-techchefz-digital-ceo-1351206

- K. Narasimha Sekhar, "**Internet of Things: Running Language Models on Edge Device**," Open Source, February 5, 2025 https://www.opensourceforu.com/2025/02/internet-of-things-running-language-models-on-edge-devices/

- Salvatore Salamone, "**2025 IoT Developments to Spur Industrial Innovations**," RT Insights, February 3, 2025 https://www.rtinsights.com/2025-iot-developments-to-spur-industrial-innovations/

- Dr. Yo-Ping Huang, '**The artificial intelligence of things and its aquaculture applications**," Global Seafood Alliance, February 4, 2024 https://www.globalseafood.org/advocate/the-artificial-intelligence-of-things-and-its-aquaculture-applications/

- The Pinnacle Gazette posting, "**Revolutionizing Safety: IoT And Machine Learning Enhance Mine Blasting Operations**," The Pinnacle Gazette, February 2, 2025 https://evrimagaci.org/tpg/revolutionizing-safety-iot-and-machine-learning-enhance-mine-blasting-operations-177991

Selected IoT Perspectives
Internet of Medical Things (IoMT)

"The basic goals of engineering include the achievement of a product's purpose, safety, cost, manufacturability, and supportability, among other things. For internet of things (IoT) applications, much of the essential purpose relates to wireless communications that untether communication from wires and cables. This is especially true of the rapidly growing internet of medical things (IoMT), where connected medical devices enable applications from inexpensive wearables and sensors to remotely controlled surgical robots and imaging systems," Brad Jolly, " What IoMT Really Stands For," Secmiconductor Engineering, January 27, 2025 https://semiengineering.com/what-iomt-really-stands-for/

- Market.us press release, "**Internet of Medical Things Market Revolution: Expected US$ 370.9 Billion Valuation by 2032**," EIN Presswire, February 13, 2025 https://www.einnews.com/pr_news/785669390/internet-of-medical-things-market-revolution-expected-us-370-9-billion-valuation-by-2032

- Aman Mishra, "**CryptoDNA: AI-Powered Cryptojacking Defense Against DDoS Threats in Healthcare IoT**," gbhackers, February 3, 2025 https://gbhackers.com/cryptodna-ai-powered-cryptojacking-defense-against-ddos-threats/

- Grayson Miller, "**Considerations and Safeguards Addressing Potential Vulnerabilities in Connected Medical Devices and the Internet of Things (IoT)**," Healthcare IT Today, October 29, 2024 https://www.healthcareittoday.com/2024/10/29/considerations-and-safeguards-addressing-potential-vulnerabilities-in-connected-medical-devices-and-the-internet-of-things-iot/

- Karen Taylor and Andrew Flockhart, "**Realising the potential of the Internet of Medical Things**," Deloitte, October 17, 2024 https://www.deloitte.com/uk/en/Industries/life-sciences-health-care/research/advances-in-digitalisation-and-connectivity-are-expediting-the-potential-of-the-internet-of-medical-things.html

- Adam Stone, "**Zero-Trust Stands as a Secure Foundation for IoMT**," FedTech Magazine, May 21, 2024 https://fedtechmagazine.com/article/2024/05/zero-trust-stands-secure-foundation-iomt

Research background info (sample) – 2024-25 : Asif, M., Abrar, M., Salam, A. et al. "**Intelligent two-phase dual authentication framework for Internet of Medical Things**," Scientific Reports 15, 1760 (published January 12, 2025) https://doi.org/10.1038/s41598-024-84713-5; Ehtesham Safeer, Sidra Tahir, Asif Nawaz, Mamoona Humayun, Momina Shaheen, and Maqbool Khan,"**Advanced hybrid malware identification framework for the Internet of Medical Things, driven by deep learning**," Wiley Online Library, August 26, 2024 https://onlinelibrary.wiley.com/doi/10.1002/spy2.454; Ghadi, Y.Y., Mazhar, T., Shahzad, T. et al. "**The role of blockchain to secure internet of medical things**," Scientific Reports 14, 18422 (published August 8,2024). https://doi.org/10.1038/s41598-024-68529-x; Chiroma Haruna, Hashem Ibrahim Abaker Targio, and Maray Mohammed, "**Bibliometric analysis for artificial intelligence in the internet of medical things: mapping and performance analysis**," Frontiers in Artificial Intelligence, published August 11, 2024 https://www.frontiersin.org/journals/artificial-intelligence/articles/10.3389/frai.2024.1347815/full

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