

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

CHRONICLE OF DIGITAL CHRONICLE OF DIGITAL
TRANSFORMATION THROUGH
INTERNET OF THINGS
TECHNOLOGIES
Some biweekly perspectives from
around the globe gathered by
CDAIT
(2050 entries since April 1, 2022)
https://cdait.gatech.edu/sites/default
/files/202401/Digital Transformation Through

01/Digital_Transformation_Through_ IoT_Technologies_January_15_2024.p df

GOVERNANCE & THE INTERNET OF THINGS

The National White Collar Crime Center (NW3C) and National Criminal Justice Training Center of Fox Valley Technical College (NCJTC), "National Internet of Things (IoT) 16-18, 2024, Las Vegas, Nevada https://ncjtc.fvtc.edu/trainings/TR01 119145/TRI1760048/national-internet-of-things-conference

Stéphane Frank, Kai Gesing, Joel Harrison, Christian Riis-Madsen, Robert Spano, Ciara O'Gara, and Jan Przerwa, "The EU Data Act, an IoT and Cloud Sector Paradigm Shift, Becomes Reality," Gibson Dunn, January 8, 2024 https://www.gibsondunn.com/eu-data-act-an-iot-and-cloud-sector-paradigm-shift-becomes-reality/

produce rare earth materials --China has dominated the market for rare earth elements, but US scientists and companies are scrambling to catch up," The MIT Technology Review, https://www.technologyreview.com/20 24/01/05/1084791/rare-earth-materials-clean-energy/

Paul Samson,Constance de Leusse, Paul Fehlinger,and Aaron Shull, "Can Responsible In 2024 And Beyond?'
TechPolicy, January 3, 2024
https://www.techpolicy.press/candisruptive-technology-be-responsiblein-2024-and-beyond/

Jacob Livesay, "Government Accountability Office urges CISA, FDA to update agreement on coordinating medical device cybersecurity," Inside Cybersecurity, -news/government-accountability-office-urges-cisa-fda-update-agreement-coordinating-medical

Maxwell Sterling, "The Evolution of Smart Cities: How Technology is Shaping Urban Living," The Jerusalem Post, January 1, 2024 https://www.jpost.com/insights/articl

GT CDAIT Biweekly IoT News Digest (1/24 - 1)

IoT News and Market Reports

(First Half of January 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 - 15 entries:
 - https://cdait.gatech.edu/sites/default/files/2024 $o1/IoT_News_Filings_January_2024_First_Half.pdf$
- Sample list of IoT-related market reports gathered by CDAIT 60 entries: https://cdait.gatech.edu/sites/default/files/2024-01/IoT_Market_Reports_January_2024_First_Half.pdf

Georgia Tech IoT-related Info/Research Noticed by CDAIT

- Lynch, Charles A., Genaro Soto-Valle, Jimmy GD Hester, and Manos M. Tentzeris, "At the Intersection Between Optics and mmWave Design: An Energy Autonomous 5G-Enabled Multilens-Based Broadbeam mmID for "Smart" Digital Twins Applications," IEEE Transactions on Microwave Theory and Techniques (2024) https://ieeexplore.ieee.org/abstract/document/10380192
- Biehler, Michael, Zhen Zhong, and Jianjun Shi, "SAGE: S tealthy A ttack Generation in cyber-physical systems," IISE Transactions 56, no. 1 (2024): 54-68. https://www.tandfonline.com/doi/abs/10.1080/24725854.2023.2184004
- ${\bf Catherine\ Barzler, ``Researchers\ Create\ First\ Functional\ Semiconductor'}$ Made From Graphene," [about related work from Walter de Heer, Regents' Professor of physics at Georgia Tech, and a team of researchers based in Atlanta, Georgia, and Tianjin, China], "GT Research, January 4, 2024 https://research.gatech.edu/feature/researchers-create-first-functionalsemiconductor-made-graphene

OF NOTE: CES 2024, Las Vegas, NV, January 9-12, 2024 - "At CES 2024, the Internet of Things was showcased in its full glory" [Source: Fernando Torres https://metroamericas.com/en/noticias-2/ces-2024-the-best-of-the-tech-fair-from-las-vegas/883124/#gsc.tab=0]; Sandeep Khanal, "CES 2024: The Mind-Blowing Tech That Stole the Show!," Vox Voyage, January 13, 2024 https://voxvoyage.com/technology/ces-2024revisited/; Amanda Blum, "CES 2024: Samsung Is Going All-In on SmartThings," LifeHacker, January 10, 2024 https://lifehacker.com/tech/ces-2024-samsung-going-all-in-on-smartthings; Kirk Miller, "The Best and Worst of AI at CES - Artificial intelligence dominated the annual consumer tech show, for better or worse," InsideHook, January 12, 2024 https://www.insidehook.com/gear/ai-ces-2024

Special Reading Suggestions

- Radhakanth Kodokula, "Top IoT Trends in 2024 and What IoT Holds for the Future?" Antino, January 11, 2024 https://www.antino.com/blog/top-9-iot-trends
- Sunil Sonkar, "How IoT is Reshaping the Railway Industry," Techiexpert, Jaunary 11, 2024 https://www.techiexpert.com/how-iot-is-reshaping-the-railway-industry/
- Circular posting, "How the Internet of Things can unlock circular business models," Circular, January 9, 2024 https://www.circularonline.co.uk/features/how-the-internet-of-things-can-unlock-circular-business-models/
- Robert Sheldon, "Top 30 IoT interview questions and answers for 2024," TechTarget, January 4, 2024 https://www.techtarget.com/whatis/feature/Top-30-IoT-interview-questions-and-answers
- Shannon Williams, "Satellite IoT emerges as key player in global environmental sustainability," IT Brief Australia, January 4, 2024 https://itbrief.com.au/story/satellite-iot-emerges-as-key-player-in-global-environmental-sustainability
- Joe McKendrick, "AIoT Means Alot: The Internet of Things Gets an Artificial Intelligence Jolt," RT Insights, January 2, 2024 https://www.rtinsights.com/aiot-means-alot-the-internet-of-things-gets-an-artificial-intelligence-jolt/
- Suraj Nair, "How IoT is powering a new era of connectivity," Express Computer, January 2, 2024 https://www.expresscomputer.in/guestblogs/how-iot-is-powering-a-new-era-of-connectivity/107783/
- Techovedas editorial team, "What are Top 10 Application of Internet of Things (IoT) in 2024," Techovedas, December 30, 2023 https://techovedas.com/what-are-top-10-application-of-internet-of-things-iot-in-2024/

Selected IoT Perspectives The Internet of Things and Ethics

"The swift advancement and integration of IoT into various sectors also raise profound ethical questions that warrant careful consideration," "The Ethical Implications of the Internet of Things (IoT)," Mark Kavinsky, IoT Business News, November 9, 2023 Z https://iotbusinessnews.com/2023/11/09/50511-the-ethical-implications-of-the-internet-of-things-iot/

- Desiree Miloshevic Evans, "How do we unlock consumer trust for IoT?" Techradar, January 11, 2023 https://www.techradar.com/pro/howdo-we-unlock-consumer-trust-for-iot
- Marshall Gunnell, "Internet of Senses (IoS) [Foundation, Future and Ethics]" Techopedia, lsat updated December 4, 2023 https://www.techopedia.com/definition/internet-of-senses-ios
- International Associaation of Business Analytics Certification (IABAC), "Data Ethics in the Internet of Things (IoT): Balancing Convenience and Privacy," IABAC, October 17, 2023 https://iabac.org/blog/data-ethics-in-the-internet-of-things-iot-balancing-convenience-
- Zac Amos, "Ethical Implications in IoT Data Collection", Readwrite, August 17, 2023 https://readwrite.com/ethical-considerations-in-iot-
- Arunjaj, "What Are the Potential Ethical Issues Arising from IoT Deployment?" Medium, June 22, 2023 https://arunraj444001.medium.com/what-are-the-potential-ethical-issues-arising-from-iot-deployment-9807cceffe39

Research background info (sample): Banerjee, Trishit, "Social, Professional, Ethical, and Security Issues Associated with IoMT [Internet of Medical Things] and Smart Healthcare: Post-COVID-19 Pandemic Scenario," In Internet of Medical Things in Smart Healthcare, pp. 163-182. Apple Academic Press, 2024 https://www.taylorfrancis.com/chapters/edit/10.1201/9781003369035-9/social-professional-ethical-security-issues-associated-iomt-smart-healthcare-post-covid-19-pandemic-scenario-trishit-banerjee; Kizza, Joseph Migga, "New Frontiers of Ethics and Security: Internet of Things

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