



GT CDAIT

Biweekly IoT News Digest (11/22 – 1)

CHRONICLE OF DIGITAL TRANSFORMATION THROUGH INTERNET OF THINGS TECHNOLOGIES

Some biweekly perspectives from around the globe gathered by CDAIT (650 entries)

https://cdait.gatech.edu/sites/default/files/2022-11/Digital_Transformation_Through_IoT_Technologies_November_15_2022.pdf

GOVERNANCE & THE INTERNET OF THINGS

Robert Lemos, "Cybersecurity 'Nutrition' Labels Still a Work in Progress - Pretty much every aspect of the effort to create easy-to-understand labels for Internet-of-Things (IoT) products is up in the air, according to participants in the process," Dark Reading, November 11, 2022 <https://www.darkreading.com/drt-tech/cybersecurity-nutrition-labels-still-a-work-in-progress>

Ryan Daws, "UK, Canada, and Singapore join forces to secure IoT devices," IoT News, November 10, 2022 <https://www.iottechnews.com/news/2022/nov/10/uk-canada-and-singapore-join-forces-secure-iot-devices/>

Mariam Baksh, "NIST Official Warns Against Device-only Approach to Securing IoT," Nextgov, November 10, 2022 <https://www.nextgov.com/cybersecurity/2022/11/nist-official-warns-against-device-only-approach-securing-iot/379595/>

Dave Nyczepir, "NIST proposes project to improve cybersecurity at water utilities," FedScoop, November 9, 2022 <https://www.fedscoop.com/nist-wvs-systems-project/>

China's State Council Information Office press release, "Digital economy becomes China's major growth engine: white paper," Xinhua, November 7, 2022 <https://english.news.cn/20221107/55a6e53810db42218829f02916c28e1/c.html>

Alan Bickerstaff and Cassandra Cuellar, "Web 3.0: Disruption and Regulatory Ambiguity," Lexology, November 3, 2022 <https://www.lexology.com/library/detail.aspx?g=f7ca546a-a8f8-416b-a5b1-9891ebab57fe>

Caitlin Schropp, "IoT Cyber Security Certification Programs Are Becoming More Prevalent. What Does It Mean For Canadian Organizations?" Mondaq, November 2, 2022 <https://www.mondaq.com/canada/security/1246426/iot-cyber-security-certification-programs-are-becoming-more-prevalent-what-does-it-mean-for-canadian-organizations>

IoT News and Market Reports

(First Half of November 2022)

- 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/2022-11/IoT_News_Filings_November_2022_First_Half.pdf
- Sample list of IoT-related market reports gathered by CDAIT– 89 entries – See: https://cdait.gatech.edu/sites/default/files/2022-11/IoT_Market_Reports_November_2022_First_Half.pdf

Georgia Tech IoT-related Info/Research Noticed by CDAIT

- Roy, Varun, and Vignesh Sreedhar. "The EU's Capacity to Lead the Transatlantic Alliance in AI Regulation," In Claremont-UC Undergraduate Research Conference on the European Union, vol. 2022, no. 1, p. 11. 2022 <https://scholarship.claremont.edu/urceu/vol2022/iss1/11/>
- Daniel S. Schiff, "Setting the Agenda for AI: Issues, and Influence in United States Artificial Intelligence Policy," Ph.D. Dissertation, GT School of Public Policy <https://smartech.gatech.edu/handle/1853/67191>
- Carlos Nkuba, Seulbae Kim, Sven Dietrich, and Heejo Lee, "Riding the IoT Wave with VFuzz: Discovering Security Flaws in Smart Home," in IEEE Access, vol. 10, pp. 1775-1789, 2022, doi: 10.1109/ACCESS.2021.3138768. <https://ieeexplore.ieee.org/document/9663293>
- Lu, Zhuoran and Dou, Yifan and Wu, D. J. and Chen, Jian, "Selling Smart and Connected Products: A Value Chain Perspective," (August 31, 2022). Available at SSRN: <https://ssrn.com/abstract=4205529> or <http://dx.doi.org/10.2139/ssrn.4205529>

OF NOTE (highlighted in MIT Technology Review's *The Download* of 11/7/22): Michael Bluhm, "Biden's hugely consequential high-tech export ban on China, explained by an expert -- The ban on semiconductor exports to China is one of the most important policy moves of the year — and could set off a geopolitical quake," https://www.vox.com/world/2022/11/5/23440525/biden-administration-semiconductor-export-ban-china?mc_cid=b017dbbd68&mc_cid=cf0b0e87e1; Zeyi Yang, "Tech Review Explains -- Inside the software that will become the next battle front in US-China chip war," MIT Technology Review, August 18, 2022 <https://www.technologyreview.com/2022/08/18/1058116/eda-software-us-china-chip-war/>

Special Reading Suggestions

- Mohit Agrawal, "IoT Key to Meeting Sustainable Development Goals 2030," Counterpoint, November 10, 2022 <https://www.counterpointresearch.com/iot-key-to-meeting-sustainable-development-goals-2030/>
- Pohan Lin, "The Big Data-IoT Relationship: How They Help Each Other," Spiceworks, November 10, 2022 <https://www.spiceworks.com/tech/big-data/guest-article/the-big-data-iot-relationship-how-they-help-each-other/>
- Naveen Joshi, "IoT is the stepping stone for digital twin technology," BBN Times, November 3, 2022 <https://www.bbnimes.com/technology/iot-is-the-stepping-stone-for-digital-twin-technology>

Selected IoT Perspectives

The Internet of Medical Things (IoMT)

"The investments in the healthcare industry have significantly increased during the pandemic. The increasing investments in IoT to transform the healthcare sector are anticipated to bolster the global internet of medical things (IoMT) market growth." Fortune Business Insights press release, "With 29.5% CAGR, Internet of Medical Things (IoMT) Market Size worth USD 187.60 Billion in 2028," Globe Newswire, October 10, 2022 <https://www.globenewswire.com/news-release/2022/10/10/2530904/0/en/With-29-5-CAGR-Internet-of-Medical-Things-IoMT-Market-Size-worth-USD-187-60-Billion-in-2028.html>

- Lachlan Colquhoun, "IoT Security Is Giving Healthcare Heart Attacks," CDO Trends, November 1, 2022 <https://www.cdotrends.com/story/17594/iot-security-giving-healthcare-heart-attacks>
- Astute Analytica press release, "Internet of Medical Things Market 2022 Expectation surges with Rising Demand by Industry Analysis through 2027," OpenPR, October 31, 2022 <https://www.openpr.com/news/2783741/internet-of-medical-things-market-2022-expectation-surges-with>
- Satavisa Pati, "Top 10 IoMT trends and use cases in healthcare for 2023," Analytics Insight, October 10, 2022 <https://www.analyticsinsight.net/top-10-iomt-trends-and-use-cases-in-healthcare-for-2023/>
- Constancio Fernandes, "Combating Security Risks is Especially Tough with Medical IoT Devices – Here's Why," Healthcare IT Today, September 21, 2022 <https://www.healthcareitoday.com/2022/09/21/combating-security-risks-is-especially-tough-with-medical-iot-devices-heres-why/>
- Splunk Data Insider posting, "What is the Internet of Medical Things (IoMT)?" Splunk website, September 12, 2022 https://www.splunk.com/en_us/data-insider/what-is-the-internet-of-medical-things-iomt.html

Research background info (sample): Hemmati, Atefeh, and Amir Masoud Rahmani. "Internet of Medical Things in the COVID-19 Era: A Systematic Literature Review," Sustainability 14, no. 19 (published online October 4, 2022): 12637 <https://www.mdpi.com/2071-1050/14/19/12637>; Hireche, Rachida, Houssein Mansouri, and Al-Sakib Khan Pathan. "Security and Privacy Management in Internet of Medical Things (IoMT): A Synthesis." Journal of Cybersecurity and Privacy 2, no. 3 (published August 17, 2022): 640-661 <https://www.mdpi.com/2624-800X/2/3/33>; Gupta, Karan, Deepak Kumar Sharma, Koyel Datta Gupta, and Anil Kumar. "A tree classifier based network intrusion detection model for Internet of Medical Things," Computers and Electrical Engineering 102 (available online June 17, 2022): 108158 <https://www.sciencedirect.com/science/article/abs/pii/S0045790622004049>; Ashfaq, Zarlish, Abdur Rafay, Rafia Mumtaz, Syed Mohammad Hassan Zaidi, Hadia Saleem, Syed Ali Raza Zaidi, Sadaf Mumtaz, and Ayesha Haque. "A review of enabling technologies for internet of medical things (IoMT) ecosystem." Ain Shams Engineering Journal 13, no. 4 (2022): 101660 <https://www.sciencedirect.com/science/article/pii/S209044792100438X>; Kamruzzaman, M. M., Ibrahim Alrashdi, and Ali Alqazzaz. "New opportunities, challenges, and applications of edge-AI for connected healthcare in internet of medical things for smart cities," Journal of Healthcare Engineering 2022 (published online February 23, 2022) <https://www.hindawi.com/journals/jhe/2022/2950699/>; Kagita, Mohan Krishna, Navod Thilakarathne, Thippa Reddy Gadekallu, and Praveen Kumar Reddy Maddikunta. "A review on security and privacy of internet of medical things," Intelligent Internet of Things for Healthcare and Industry (first online, February 12, 2022): 171-187. <https://www.hindawi.com/journals/jhe/2022/2950699/> https://link.springer.com/chapter/10.1007/978-3-030-81473-1_8