GT CDAIT
Biweekly IoT News Digest (07/22 – 2)

February 2021 Highlights

GOVERNANCE & THE INTERNET OF THINGS

Kenta Yasukawa, "**iSIMs [integrated SIMs]: How a 'Zero Footprint' Authentication Token is Poised to Democratize Io**T," IoT Business News, July 26, 2022
https://iotbusinessnews.com/2022/07/26/61450-isims-how-a-zero-footprint-authentication-token-is-poised-to-democratize-iot/

Vikrant Viniak, "**How IoT helps environmental, social and governance goals**," Tech Target (IoT Agenda), July 21, 2022
https://www.techtarget.com/iotagenda/post/How-IoT-helps-environmental-social-and-governance-goals

Lara Williams, "**Big Tech leads development of the internet of things**," Investment Monitor, July 20, 2022
https://www.investmentmonitor.ai/tech/internet-of-things-development-big-tech

Gartner, "**What Is Digital Government?**" Gartner website , n.d., https://www.gartner.com/en/topics/digital-government

Lia Jiabao, "**China to embrace golden era of IoT development**," News Ghana (from People's Daily [China]), July 18, 2022 https://newsghana.com.gh/china-to-embrace-golden-era-of-iot-development/

Punch posting, "**Nigeria prepares for IoT regulation**," Punch [Nigeria], July 17, 2022 https://punchng.com/nigeria-prepares-for-iot-regulation/

Godfrey Ludvia, " **Pan-African Trade Enabling Africa's Fourth Industrial Revolution**," Busiweek [Uganda], July 15, 2022 https://www.busiweek.com/pan-african-trade-enabling-africas-fourth-industrial-revolution/

IoT News and Market Reports

(Second Half of July 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 – 16 entries - See: https://cdait.gatech.edu/sites/default/files/2022-07/IoT_News_Filings_July_2022__Second_Half.pdf

- Sample list of **IoT-related market reports** gathered by CDAIT– 93 entries – See: https://cdait.gatech.edu/sites/default/files/2022-07/IoT_Market_Reports_July_2022_Second_Half.pdf

Georgia Tech IoT-related Info/Research Noticed by CDAIT

- Thorsteinsson, Saemundur E., Helgi Thorbergsson, Kristinn Andersen, and Ian F. Akyildiz. "**Remote IoT teaching across the North-Atlantic**." In 2022 31st Annual Conference of the European Association for Education in Electrical and Information Engineering (EAEEIE), pp. 1-5. (added to IEEE Xplore, July 13, 2022), https://ieeexplore.ieee.org/abstract/document/9820316

- Christa M. Ernst, "**Ye Zhao Wins NSF CAREER Award for "Interactive Decision-making and Resilient Planning for Safe Legged Locomotion and Navigation**," GT George W. Woodruff School of Mechanical Engineering website, July 13, 2022 https://www.me.gatech.edu/news/ye-zhao-wins-nsf-career-award-interactive-decision-making-and-resilient-planning-safe-legged

- Zhao, Binbin, Shouling Ji, Jiacheng Xu, Yuan Tian, Qiuyang Wei, Qinying Wang, Chenyang Lyu et al. "**A large-scale empirical analysis of the vulnerabilities introduced by third-party components in IoT firmware**." In Proceedings of the 31st ACM SIGSOFT International Symposium on Software Testing and Analysis, pp. 442-454, online July 18, 2022 https://dl.acm.org/doi/abs/10.1145/3533767.3534366

OF NOTE: Gartner press release**, "Gartner Survey Finds That Majority of Technology Purchases Come with High Degree of Regret,"** July 12, 2022 https://www.gartner.com/en/newsroom/press-releases/2022-07-12-gartner-finds-that-majority-of-technology-purchases-come-with-high-degree-of-regret --- Rick Whiting, **"Emerging edge computing and IoT vendors to know in 2022," CRN, July 20, 2022** https://www.crn.com/news/internet-of-things/emerging-edge-computing-and-iot-vendors-to-know-in-2022

Special Reading Suggestions

- Khlong Song, "**Thailand's model of digital technology for farmers with disabilities**," Pressenza, July 24, 2022 https://www.pressenza.com/2022/07/thailands-model-of-digital-technology-for-farmers-with-disabilities/

- Jason Walsh, "**IoT under attack**," Tech Central [Ireland], July 20, 2022 https://www.techcentral.ie/iot-under-attack/

- Milad Aslaner, "**Tackling the IoT cybersecurity blind spot**," PCR online, July 18, 2022 https://www.pcr-online.biz/2022/07/18/tackling-the-iot-cybersecurity-blind-spot/

- Toby Mills, "**Why more IoT isn't the answer to supply chain disruptions**," Engineering & Technology, July 18, 2022 https://eandt.theiet.org/content/articles/2022/07/why-more-iot-isn-t-the-answer-to-supply-chain-disruption/

Selected IoT Perspectives
The Internet of Things and Privacy

"As a user, it is important to make an informed decision by understanding the trade-offs between privacy and comfort when buying, installing and using an internet-connected device." (*)

*(*) Roberto Yus and Primal Pappachan, "**Smart devices spy on you – 2 computer scientists explain how the Internet of Things can violate your privacy,**" The Conversation, March 14, 2022 https://theconversation.com/smart-devices-spy-on-you-2-computer-scientists-explain-how-the-internet-of-things-can-violate-your-privacy-174579*

- Jon Keegan and Alfred Ng, **" Who Is Collecting Data from Your Car?"** The Markup, July 27, 2022 https://themarkup.org/the-breakdown/2022/07/27/who-is-collecting-data-from-your-car?mc_cid=b0441003bd&mc_eid=cf0b0e87e1

- Stacy Gray, "**The Bipartisan [U.S.] House Privacy Bill Would Surpass State Protections**," Lawfare, July 21, 2022 https://www.lawfareblog.com/bipartisan-house-privacy-bill-would-surpass-state-protections; and Derek B. Johnson, "**National data privacy law draws mixed reaction from civil liberties, industry groups**," SC Media, July 21, 2022 https://www.scmagazine.com/analysis/privacy/national-data-privacy-law-draws-mixed-reaction-from-civil-liberties-industry-groups

- Emil Sayegh, "**The First Battlegrounds For Renewed Privacy**," Forbes, July 14, 2022 https://www.forbes.com/sites/emilsayegh/2022/07/14/the-first-battlegrounds-for-renewed-privacy/?sh=2cf2b86b7be7

- U.S. Federal Trade Commission, "**Location, health, and other sensitive information: FTC committed to fully enforcing the law against illegal use and sharing of highly sensitive data**," FTC, July 11, 2022 https://www.ftc.gov/business-guidance/blog/2022/07/location-health-other-sensitive-information-ftc-committed-fully-enforcing-law-against-illegal-use

Research background info (sample): Ali, Waqas, Mohammad Nauman, and Nouman Azam. "**A privacy enhancing model for Internet of Things using three-way decisions and differential privacy,**" Computers and Electrical Engineering 100 (May 2022): 107894 https://www.sciencedirect.com/science/article/abs/pii/S0030402622002583; Jaspers, Esther DT, and Erika Pearson. "**Consumers' acceptance of domestic Internet-of-Things: The role of trust and privacy concerns,**" Journal of Business Research 142 (March 2022): 255-265 https://www.sciencedirect.com/science/article/abs/pii/S0148296321009589; Rayes, Ammar, and Samer Salam. "**Internet of things security and privacy," In Internet of Things from Hype to Reality**, pp. 213-246. Springer, Cham, first online March 3, 2022 https://link.springer.com/chapter/10.1007/978-3-030-90158-5_8; Liu, X., X. Wang, K. Yu, X. Yang, W. Ma, G. Li, and X. Zhao. "**Secure data aggregation aided by privacy preserving in Internet of Things,**" Wireless Communications and Mobile Computing 2022 (2022) https://www.hindawi.com/journals/wcmc/2022/4858722/; 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://link.springer.com/chapter/10.1007/978-3-030-81473-1_8, FTC Staff, "**A Look at what ISPs Know About You: Examining the Privacy Practices of Six Major Internet Service Providers,**" October 21, 2021 https://www.ftc.gov/news-events/press-releases/2021/10/ftc-staff-report-finds-many-internet-service-providers-collect; Wanrong Zhang, "**Privacy-preserving Statistical Tools: Differential Privacy and Beyond,**" Dissertation in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy in the Georgia Tech College of Engineering H. Milton Stewart School of Industrial and Systems Engineering (ISyE), May 2021 https://smartech.gatech.edu/handle/1853/64789 - See also video (1mn) on "**Cyber-Security & Data Privacy in IoT Systems,**" Center for Predictive Analytics and Intelligent Systems (PAIS), Georgia Tech Stewart School of Industrial and Systems Engineering (ISyE), June 29, 2020 https://youtu.be/oloJ_G3oTyQ

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