GT CDAIT
Biweekly IoT News Digest (06/22 – 2)

February 2021 Highlights

CHRONICLE OF DIGITAL TRANSFORMATION THROUGH INTERNET OF THINGS TECHNOLOGIES

Some biweekly perspectives from around the globe gathered by CDAIT
(216 entries)
https://cdait.gatech.edu/sites/default/files/2022-06/Digital_Transformation_Through_IoT_Technologies_June_30_2022.pdf

GOVERNANCE & THE INTERNET OF THINGS

OECD, "**Focus on rights in the digital age,**" n.d. (April 12, June 28, and September 2022 workshops)
https://www.oecd.org/digital/rights/

John Yellig, "**Militarized Drone Swarms Coming,**" IoT World Today, June 28, 2022
https://www.iotworldtoday.com/2022/06/28/militarized-drone-swarms-are-coming/

Schalk Burger, "**IoT can help drive fundamental ESG solutions, says council [IoT Industry Council of South Africa (IOTIC)],**" Engineering News, June 24, 2022
https://www.engineeringnews.co.za/article/iot-can-help-drive-fundamental-esg-solutions-says-council-2022-06-24

Alexandra Lohr, "**Creating a safe space for IoT,**" Federal News Network, June 21, 2022
https://federalnewsnetwork.com/technology-main/2022/06/creating-a-safe-space-for-iot/

Eszter Sieber-Fazakas, "**Data Act: New European Legislation Coming for Data Economy,**" Budapest Business Journal, June 18, 2022
https://bbj.hu/economy/statistics/analysis/data-act-new-european-legislation-coming-for-data-economy

Alexandra Lohr, "**New research puts internet of things at forefront of public-private partnerships**," Federal News Network, June 14, 2022
https://federalnewsnetwork.com/technology-main/2022/06/new-research-puts-internet-of-things-at-forefront-of-public-private-partnerships/

IoT News and Market Reports

(Second Half of June 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/2022-06/IoT_News_Filings_June_2022__Second_Half.pdf

- Sample list of **IoT-related market reports** gathered by CDAIT– 95 entries – See:
https://cdait.gatech.edu/sites/default/files/2022-06/IoT_Market_Reports_June_2022_Second_Half.pdf

Georgia Tech IoT-related Info/Research Noticed by CDAIT

- Verma, Prashant. **"Messaging Protocols for the Internet of Things,"** International Journal of Enhanced Research in Science, Technology & Engineering, ISSN: 2319-7463, Vol. 11 Issue 4, April-2022
https://www.researchgate.net/profile/Prashant-Verma-42/publication/360919860_Messaging_Protocols_for_the_Internet_of_Things/links/6292add16886635d5cabe577/Messaging-Protocols-for-the-Internet-of-Things.pdf

- Avi Goldfarb and Jon R. Lindsay; "**Prediction and Judgment: Why Artificial Intelligence Increases the Importance of Humans in War,**" International Security 2022; 46 (3): 7–50. doi:
https://doi.org/10.1162/isec_a_00425

OF NOTE: * Internet of Things (IoT) Conferences 2022/2023/2024 [Update] https://conferenceindex.org/conferences/internet-of-things-iot
* Günter Knieps, "Internet of Things and the Governance of Big Data and Artificial Intelligence," presentation at the 11th FSR [Florence, Italy School of Regulation] Annual Conference on "From Data Spaces to Data Governance", European University Institute 9-10 June 2022 https://fsr.eui.eu/wp-content/uploads/2022/04/3_KNIEPS_Presentation-G.Knieps-5-June-2022-r.pdf **[more conference presentations are here:** https://fsr.eui.eu/event/11th-fsr-annual-conference-from-data-spaces-to-data-governance/**]**

Special Reading Suggestions

- Nahla Davies, "**Chip-to-Cloud IoT: A Step Toward Web3,**" Devops.com, June 28, 2022 https://devops.com/chip-to-cloud-iot-a-step-toward-web-3-0/
- Rishi Mohan Bhatnagar, "**Intersection of IoT and Metaverse,**" Business Line, June 22, 2022
https://www.thehindubusinessline.com/opinion/intersection-of-iot-and-metaverse/article65552983.ece
- Data Journalism Team, "**The power industry found it harder to fill internet of things vacancies in Q1 2022,**" Power Technology, June 20, 2022 https://www.power-technology.com/analysis/the-power-industry-found-it-harder-to-fill-internet-of-things-vacancies-in-q1-2022/
- Jennifer Torres, "**The State of IoT in 2022,**" CMS Wire, June 15, 2022 https://www.cmswire.com/digital-experience/the-state-of-iot-in-2022/

Selected IoT Perspectives
Power Sources for the Internet of Things

"One of the greatest barriers to IoT technology is the implementation of sustainable, functional deployment. The multifunctionality of the Internet of Things (IoT) comes at a cost in terms of power. While traditional battery power is the most obvious solution for remote applications, it's not always economical. (*)
*(*) Dan Sullivan, "**Optimizing IoT Power Consumption**," IoT World Today, May 8, 2020* https://www.iotworldtoday.com/2020/05/08/optimizing-iot-power-consumption/

- Technology Networks posting, "**Bacterial Interactions Generate Power for Weeks in Novel Biobatteries,**" June 23, 2022
https://www.technologynetworks.com/tn/news/bacterial-interactions-generate-power-for-weeks-in-novel-biobatteries-362964
- KTH (Royal Institute of Technology, Sweden) press release, "**Ink could enable devices powered by heat,**" Eurekalert, June 14, 2022
https://www.eurekalert.org/news-releases/956052
- Kiran N. Kumar, "**Distant wireless power transfer with 5G to become reality soon,**" The American Bazaar, June 14, 2022
https://www.americanbazaaronline.com/2022/06/14/distant-wireless-power-transfer-with-5g-to-become-reality-soon-449925/
- Markets and Markets Research Private Ltd press release, "**Energy harvesting system market is expected to grow at the CAGR of 8.4 % during the forecast period of 2021-2026,**" Digital Journal, June 10, 2022 https://www.digitaljournal.com/pr/energy-harvesting-system-market-is-expected-to-grow-at-the-cagr-of-8-4-during-the-forecast-period-of-2021-2026#ixzz7WMYBcqtG
- Strategic Market Research press release, "**3D Printed Battery Market is expected to grow with a CAGR of 19.53%,**" June 8, 2022
https://www.globenewswire.com/en/news-release/2022/06/08/2459145/0/en/3D-Printed-Battery-Market-is-expected-to-grow-with-a-CAGR-of-19-53.html
- Tracy Cozzens, "**Nestwave white paper considers power consumption for IoT devices,**" GPS World, June 4, 2022
https://www.gpsworld.com/nestwave-white-paper-considers-power-consumption-for-iot-devices/
- John Koon, "**Energy Harvesting Starting To Gain Traction**," Semiconductor Engineering, April 18, 2022
https://semiengineering.com/energy-harvesting-starting-to-gain-traction/
- Stacey Higginbotham, "**The battery-free IoT revolution is here!,**" Stacey on IoT, April 11, 2022 https://staceyoniot.com/the-battery-free-iot-revolution-is-here/
- Daniel de Wolff, "**The future of the IoT (batteries not required),**" MIT News, May 21, 2021 https://news.mit.edu/2021/future-iot-batteries-not-required-0521
- Manos M. Tentzeris and Alain Louchez, "**Independent power to boost the Internet of Things' lift off,**" IoT Now, August 27, 2015
https://www.iot-now.com/2015/08/27/36235-independent-power-to-boost-the-internet-of-things-lift-off/

Research background info (sample): Springer, "**Energy harvesting to power the Internet of Things**." ScienceDaily, June 13, 2022. www.sciencedaily.com/releases/2022/06/220613111942.htm; Liu, Ruiyuan, Zhong Lin Wang, Kenjiro Fukuda, and Takao Someya. "**Flexible self-charging power sources,**" Nature Reviews Materials (online May 12, 2022): 1-17 https://www.nature.com/articles/s41578-022-00441-0 ; Eid, Aline, Jimmy Hester, and Manos M. Tentzeris. "**Extending the Range of 5G Energy Transfer: Towards the Wireless Power Grid**" In 2022 16th European Conference on Antennas and Propagation (EuCAP), pp. 1-4. IEEE, online April 1, 2022 https://ieeexplore.ieee.org/abstract/document/9769572; Gregory D. Durbin, "**WWB02: Antennas in Circuits for Energy Harvesting,**" Georgia Tech Propagation Group, August 15, 2018 https://www.propagation.gatech.edu/2018/08/15/1337/

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