February 2021 Highlights

GT CDAIT
Biweekly IoT News Digest (07/21 – 1)

COVID-19 & THE INTERNET OF THINGS

See some perspectives gathered by CDAIT on the use of IoT technologies in preventing and monitoring COVID-19 like infectious diseases & pandemic impact on IoT – as of 07/15/2021 – 881 entries:
https://devcdait.gatech.edu/sites/default/files/ovid-19_iot_january_2020_july_15_2021.pdf

GOVERNANCE & THE INTERNET OF THINGS

Jocelyn Brown, "**Smart waste management could help USA reach government targets for recycling**," IoT Now, July 7, 2021 https://www.iot-now.com/2021/07/07/111217-smart-waste-management-could-help-usa-reach-government-targets-for-recycling/

Towards an IoT for the military: Mandy Mayfield, "**Army Readies New Tech for Communications Modernization**," National Defense, July 6, 2021 https://www.nationaldefensemagazine.org/articles/2021/7/6/army-readies-new-tech-for-communications-modernization

Scott Ikeda, "**Outgoing Privacy Commissioner Calls GDPR "Broken," Says That Basic Model "Can't Work**"," CPO Magazine, July 1, 2021 https://www.cpomagazine.com/data-protection/outgoing-privacy-commissioner-calls-gdpr-broken-says-that-basic-model-cant-work/

Europe's Internet of Things Policy – Latest update, July 1, 2021 https://digital-strategy.ec.europa.eu/en/policies/internet-things-policy

REQUEST FOR INFORMATION (RFI): Department of Homeland Security (DHS) Small Business Innovation Research (SBIR) Program Other Agency Technology Solutions (OATS) **5G Internet of Things Situational Awareness System** – Deadline: July 30, 2021 https://sam.gov/opp/d36db3308b384d2099c6f7d6239ef4fa/view

IoT News and Market Reports
(First Half of July 2021)

- 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://devcdait.gatech.edu/sites/default/files/iot_news_filings_july_2021_first_half.pdf
- Sample list of **IoT-related market reports** gathered by CDAIT– 74 entries – See: https://devcdait.gatech.edu/sites/default/files/iot_market_reports_july_2021_first_half.pdf

Georgia Tech IoT-related Info/Research Noticed by CDAIT

- Allen, J. K., Commuri, S., Jiao, R., Milisavljevic-Syed, J., Mistree, F., Panchal, J., and Schaefer, D. (May 26, 2021). "**Special Issue: Design Engineering in the Age of Industry 4.0.**" ASME. Journal of Mechanical Design, July 2021; 143(7): 070301. https://doi.org/10.1115/1.4051042

- Renay San Miguel, "**Surfacing New Clues: Water's Impact in Undersea Earthquakes,**" Georgia Tech Research Horizons, July 7, 2021 https://rh.gatech.edu/news/648100/surfacing-new-clues-waters-impact-undersea-earthquakes

- M Biehler, Z Zhong, and J Shi, "**SAGE: Stealthy Attack GEneration for Cyber-Physical Systems**," Engineering, May 2021 - arXiv preprint arXiv:2106.09905 https://arxiv.org/abs/2106.09905

OF NOTE: Pipeline special issue on the "**IoT and the Device Revolution**," Pipeline, July 2021, Volume 17, Issue 9 [9 articles] https://www.pipelinepub.com/IoT/article_index - *"The world had been embracing technology and digital transformation was well underway prior to the pandemic. The only thing that changed was the necessity of transformation which has led to an acceleration of a whole host of new and emerging technologies, such as 5G, AI, and IoT. Many of these changes are here to stay as we come together, now as a globally connected digital community, to continue to combat the pandemic, and evolve."* – Scott St. John, Pipeline Managing Editor

Special Reading Suggestions

- Jonathan Stern,Johan Vermij, Christian Renaud, Brian O'Rourke and Mark Fontecchio "**2021 Tech M&A Outlook: Internet of Things,**" SP Global, July 8, 2021 https://www.spglobal.com/marketintelligence/en/news-insights/blog/2021-tech-ma-outlook-internet-of-things
- Nick Hoskins, "**Why IoT is mission critical to monitoring all the vital signs of healthcare logistics,**" Hospital and Healthcare, July 8, 2021 https://www.hospitalhealth.com.au/content/technology/article/why-iot-is-mission-critical-to-monitoring-all-the-vital-signs-of-healthcare-logistics-595918858
- John Caroline, "**What is Iota (MIOTA) coin?**" Coinspeaker, July 3, 2021 https://www.coinspeaker.com/guides/what-is-iota-miota-coin/
- Dave Sutton, "**4 Critical Enablers of Digital Strategy**," Business2Communnity, July 2, 2021 https://www.business2community.com/digital-marketing/4-critical-enablers-of-digital-strategy-02416340
- Bryon Moyer, "**IoT Security: Confusing And Fragmented**," Semiconductor Engineering, July 1, 2021 https://semiengineering.com/iot-security-confusing-and-fragmented/
- Christian Lutz, "**Poor data planning causes manufacturers' IIoT projects to fail**," IoT Agenda, July 1, 2021 https://internetofthingsagenda.techtarget.com/post/Poor-data-planning-causes-manufacturers-IIoT-projects-to-fail

Selected IoT Perspectives
Internet of Things Forensics

- Michelle Ann Joseph, "**Digital Forensics is ready for its most recent challenge: IoT Forensics,**" LinkedIn, July 1, 2021 https://www.linkedin.com/pulse/digital-forensics-ready-its-most-recent-challenge-iot-joseph
- ResearchAndMarkest.com Press Release, "**Insights on the Digital Forensics Global Market to 2026 - Key Motivators, Restraints and Opportunities**." ResearchAndMarkets.com website, June 10, 2021 https://www.businesswire.com/news/home/20210610005813/en/Insights-on-the-Digital-Forensics-Global-Market-to-2026---Key-Motivators-Restraints-and-Opportunities---ResearchAndMarkets.com

Research background info: "**IoT-SECFOR 2021, The 5th International Workshop on Security and Forensics of IoT**" https://www.ares-conference.eu/workshops/iot-secfor-2021/to be held in conjunction with the 16th International Conference on Availability, Reliability and Security (ARES 2021 – http://www.ares-conference.eu); August 17 – August 20, 2021; Liam Dawson and Alex Akinbi, "**Challenges and opportunities for wearable IoT forensics: TomTom Spark 3 as a case study**," Forensic Science International: Reports, Volume 3, July 2021, 100198, https://www.sciencedirect.com/science/article/pii/S2665910721000293; Pantaleon Lutta, Mohamed Sedky, Mohamed Hassan, Uchitha Jayawickrama, and Benhur Bakhtiari Bastaki, "**The complexity of Internet of Things forensics: A state-of-the-art review**," Forensic Science International Digital Investigation, September 2021, Volume 38 https://www.sciencedirect.com/science/article/pii/S2666281721001189 Asia ALJAHDALI, Hanan ALDISSI, Shoroq BANAFEE, Sundos SOBAHI, and Wafaa NAGRO, "**IoT Forensic models analysis,**" Romanian Journal of Information Technology and Automatic Control, ISSN 1220-1758, vol. 31(2), pp. 21-34, 2021. https://doi.org/10.33436/v31i2y202102 pdf version: https://rria.ici.ro/wp-content/uploads/2021/06/art._Aljahdali_Aldissi_Banafee_Sobahi_Nagro.pdf; Juan Manuel Castelo Gómez, JavierCarrillo Mondéjar, JoséRoldán Gómez, and JoséMartínez Martínez, "**Developing an IoT forensic methodology. A concept proposal**," Forensic Science International: Digital Investigation, Volume 36, Supplement, April 2021, 301114, https://www.sciencedirect.com/science/article/pii/S2666281721000081; Janarthanan T., Bagheri M., Zargari S. (2021) "**IoT Forensics: An Overview of the Current Issues and Challenges,**" In: Montasari R., Jahankhani H., Hill R., Parkinson S. (eds) Digital Forensic Investigation of Internet of Things (IoT) Devices. Advanced Sciences and Technologies for Security Applications. Springer, Cham, first online 12/20/2020 https://doi.org/10.1007/978-3-030-60425-7_10; Jianwei Hou; Yuewei Li; Jingyang Yu; and Wenchang Shi, "**A Survey on Digital Forensics in Internet of Things**," IEEE Internet of Things Journal, Volume: 7, Issue: 1, Jan. 2020 https://ieeexplore.ieee.org/document/8831387

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