



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 05/31/2021 - 818 entries:

https://devcdait.gatech.edu/sites/default/files/ovid-19_iot_january_2020_may_31_2021.pdf

GOVERNANCE & THE INTERNET OF THINGS

Jessica Davis, “NIST [National Institute of Standards and Technology] IoT Guidance for Network-Based Attacks, Device Communication,” Health IT Security, May 27, 2021

<https://healthitsecurity.com/news/nist-iot-guidance-for-network-based-attacks-device-communication>

Peter Gutierrez, “European Initiative for the Internet of Things [Global Navigation Satellite System],” Inside GNSS, May 23, 2021

<https://insidegnss.com/european-initiative-for-the-internet-of-things/>

About the Biden Administration’s “Executive Order on Improving the Nation’s Cybersecurity,” issued on May 12, 2021 as it relates to Information Technology, Operational Technology and the Internet of Things: Townsend Bourne and Nikole Snyder, “Biden’s Cybersecurity Executive Order,” JDSupra, May 19, 2021

<https://www.jdsupra.com/legalnews/biden-s-cybersecurity-executive-order-7278377/>

United Nations Press Release “Ensure digital technologies are ‘a force for good’, [United Nations-Secretary General] Guterres says in message for International Day” UN News, May 17, 2021

<https://news.un.org/en/story/2021/05/1092052>

[U.S.] Legislation that its authors say would advance precision agriculture technology has cleared another hurdle – see Larry Lee, “Internet of Things Bill clears Commerce Committee,” Brownfield AG News, May 14, 2021

<https://brownfieldagnews.com/news/internet-of-things-bill-clears-commerce-committee/>

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Biweekly IoT News Digest (05/21 – 2)

IoT News and Market Reports

(Second Half of May 2021)

- Selected IoT-related announcements and featured activities/topics in the second half of May 2021 gathered by CDAIT from governments; agencies; consortia; alliances; associations; standards, research and other similar groups around the world – 16 entries - See: https://devcdait.gatech.edu/sites/default/files/iot_news_filings_may_2021_second_half.pdf
- Sample list of IoT-related market reports published in the second half of May 2021 gathered by CDAIT– 81 entries – See: https://devcdait.gatech.edu/sites/default/files/iot_market_reports_may_2021_second_half.pdf

Georgia Tech IoT-related Info/Research Noticed by CDAIT

- The Rehabilitation Engineering Research Center for Wireless Inclusive Technologies (Wireless RERC), “Technology and Disability Policy Highlights - Spring 2021,” May 14, 2021 <https://cacp.gatech.edu/news/item/647473/technology-disability-policy-highlights-spring>
- Bin He ,Yu Song , and Yan Wang, “Introduction to Special Issue Titled Digital Twin Driven Design and Manufacturing,” J. Comput. Inf. Sci. Eng., June 2021, 21(3): 030301 (2 pages), available on May 11, 2021 <https://asmedigitalcollection.asme.org/computingengineering/article/21/3/030301/1108202/Special-Issue-Digital-Twin-Driven-Design-and>
- Ramyad Hadidi, Jiashen Cao, and Hyesoon Kim, “Creating Robust Deep Neural Networks With Coded Distributed Computing for IoT Systems,” arXiv:2104.04447v1 [cs.DC], submitted April 7, 2021 <https://arxiv.org/abs/2104.04447>

OF NOTE: The U.S. National Institute of Standards and Technology (NIST) seeks comments (due June 14, 2021) on draft paper on “Establishing Confidence in IoT Device Security: How do we get there?” NIST, May 14, 2021 [Comments due June 14, 2021] <https://csrc.nist.gov/publications/detail/white-paper/2021/05/14/establishing-confidence-in-iot-device-security/draft>

Special Reading Suggestions

- 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>
- Arunangshu Chattopadhyay, “Smart manufacturing and the rise of IIoT,” Future IoT, May 21, 2021 <https://futureiot.tech/smart-manufacturing-and-the-rise-of-iiot/>
- Daphne Leprince-Ringuet, “Developer burnout and a global chip shortage: The IoT is facing a perfect storm,” ZDNet, May 19, 2021 <https://www.zdnet.com/article/developer-burn-out-and-a-global-chip-shortage-the-iot-is-facing-a-perfect-storm/>
- Dan Jones, “NB-IoT Over-hype Reaches Some Kind of Stasis,” EE Times (India), May 18, 2021 <https://www.eetindia.co.in/nb-iot-over-hype-reaches-some-kind-of-stasis/>
- Emma Mahy, “Tech for good: How the Internet of Things is revolutionizing the wellbeing of residents in assisted living,” IT Pro Portal, May 18, 2021 <https://www.itproportal.com/features/tech-for-good-how-the-internet-of-things-is-revolutionizing-the-wellbeing-of-residents-in-assisted-living/>
- Robert J. Bowman, “Why ‘Zero Trust’ Is the Best Way to Shore Up IoT Device Security,” SupplyChainBrain, May 17, 2021 <https://www.supplychainbrain.com/blogs/1-think-tank/post/33101-why-zero-trust-is-the-best-way-to-shore-up-iot-device-security>

Selected IoT Perspectives Internet of Things Testing

- MarketInsightsReport Press Release, “IoT Testing Market 2021 Size, Status and Business Outlook,” May 20, 2021 <https://ksusentinel.com/2021/05/20/iot-testing-market-2021-size-status-and-business-outlook-ibmcorporation-apicaab-fourtechnologiesinc/>
 - Dominik Obermaier, “A new generation of a new world of value from IoT-testing tools,” Smart Industry, April 21, 2021 <https://www.smartindustry.com/articles/2021/a-new-generation-of-iot-testing-tools/>
 - Constance Drugeot, “The Rise of IoT Testing,” Software Testing News, March 22, 2021 <https://www.softwaretestingnews.co.uk/the-rise-of-iot-testing/>
 - HiveMQ, “It’s Time for Next-Generation IoT Testing Tools,” IoT for All, April 2, 2021 <https://www.iotforall.com/a-new-generation-of-iot-testing-tools>
 - Atakan Kantarci, “IoT Testing: Framework, Challenges, Case studies & Tools [2021],” AI Multiple, January 1, 2021 <https://research.aimultiple.com/iot-testing/>
 - Rahul Jain, “12 Important Software Testing Trends for 2021 You Need to Know,” Lambda Test, December 17, 2020 <https://www.lambdatest.com/blog/12-software-testing-trends-2021/>
- Research background info:** A. Makhshari and A. Mesbah, “IoT Bugs and Development Challenges,” 2021 IEEE/ACM 43rd International Conference on Software Engineering (ICSE), available online May 7, 2021, pp. 460-472, doi: 10.1109/ICSE43902.2021.00051 <https://ieeexplore.ieee.org/document/9402092>; Beilharz, Jossekin; Wiesner, Philipp; Boockmeyer, Arne; Brokhausen, Florian; Behnke, Ilija; Schmid, Robert; Pirl, Lukas; Thamsen, Lauritz, “Towards a Staging Environment for the Internet of Things,” available online January 26, 2021 <https://arxiv.org/abs/2101.10697>; Babur HayatMalik, Myda Khalid, Maliha Maryam, M. Nauman Ali, Sheraz Yousaf, Mudassar Mehmood, and Hammad Saleem, “IoT Testing-as-a-Service: A New Dimension of Automation,” International Journal of Advanced Computer Science and Applications(IJACSA), Volume 10 Issue 5, 2019. <https://thesai.org/Publications/ViewPaper?Volume=10&Issue=5&Code=IJACSA&SerialNo=45>