



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 and related issues – as of 09/15/2021 – 966 entries:

https://devcdait.gatech.edu/sites/default/files/covid-19_iot_january_2020_september_15_2021.pdf

GOVERNANCE & THE INTERNET OF THINGS

Andrea Donà, “Vodafone: We need to focus on the tech we already have [e.g., IoT and 5G] to tackle climate change rather than gambling our future on innovation,” City A.M., September 14, 2021

<https://www.cityam.com/vodafone-climate-change-technology-innovation-telecomms/>

World Economic Forum, “Empowered Data Societies: A Human-Centric Approach to Data Relationships,” WEF, September 8, 2021

<https://www.weforum.org/whitepapers/empowered-data-societies-a-human-centric-approach-to-data-relationships>

Sridhar Gadhi, “[Good Governance] Outcomes-as-a-Service (OaaS): Transforming safety and citizen services,” Your Story [Bengaluru], September 7, 2021

<https://yourstory.com/socialstory/2021/08/08/as-citizen-services-transport-smart-cities/amp>

IoT and Blockchain: Micha Binoliel co-founder at Noodle with Ishan Pandey, “Regulators are Just Starting to Understand Crypto and the Impact it can Have on our Society,” Hackernoon, September 5, 2021

<https://hackernoon.com/regulators-are-just-starting-to-understand-crypto-and-the-impact-it-can-have-on-our-society-0n137wf>

Oliver Noyan, “Germany to invest billions to bring semiconductor production back to Europe,” Euractiv, September 3, 2021

<https://www.euractiv.com/section/digital/news/germany-to-invest-billions-to-bring-semiconductor-production-back-to-europe/>

Daniel Alvarado and Townsend Bourne “NIST Seeks Comments [due 9/20] on Major Revision to Practices for Developing Cyber-Resilient Systems (SP 800-160) and Assessing Security and Privacy Controls in Information Systems and Organizations (SP 800-53A), [due 10/1]” JDSupra, August 31, 2021

<https://www.jdsupra.com/legalnews/double-time-nist-seeks-comments-on-5833727/>

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Biweekly IoT News Digest (09/21 – 1)

IoT News and Market Reports

(First Half of September 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_september_2021_first_half.pdf
- Sample list of IoT-related market reports gathered by CDAIT– 80 entries – See: https://devcdait.gatech.edu/sites/default/files/iot_market_reports_september_2021_first_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 – July 2021,” published in August 2021 <http://www.wirelessrerc.gatech.edu/technology-and-disability-policy-highlights-july-2021>
- Qinying Wang et al. (including Binbin Zhao and Raheem Beyah of Georgia Tech), “MP [Messaging Protocols] Inspector: A Systematic and Automatic Approach for Evaluating the Security of IoT Messaging Protocols,” Proceedings of the 30th USENIX Security Symposium, August 11-13, 2021 <https://www.usenix.org/system/files/sec21-wang-qinying.pdf>
- Ajibayo Adeyeye, Charles Lynch, Xuanke He, Sanghoon Lee, John D. Cressler, and Manos M. Tentzeris, “Fully Inkjet Printed 60GHz Backscatter 5G RFID Modules for Sensing and Localization in Internet of Things (IoT) and Digital Twins Applications,” IEEE Xplore, August 10, 2021 <https://ieeexplore.ieee.org/document/9501590>

OF NOTE: -- Gregory Gimpel (Georgia State University) and Allan Alter (MIT), “Benefit From the Internet of Things Right Now by Accessing Dark Data,” in IT Professional, vol. 23, no. 2, pp. 45-49, 1 March-April 2021, doi: 10.1109/MITP.2020.3025483 <https://ieeexplore.ieee.org/document/9392088>

Special Reading Suggestions

- Linda Rosencrance, “Exploring IoT Connectivity Options,” IoT for All, September 13, 2021 <https://www.iotworldtoday.com/2021/09/13/exploring-iot-connectivity-options/>
- Joe Dyton, “Growing telehealth trend reinforces need for connectivity,” Connected Real Estate Magazine, September 8, 2021 <https://connectedremag.com/healthcare-connectivity/growing-telehealth-trend-reinforces-need-for-connectivity/>
- Jimmy Jones, “Delivering IoT Connectivity at Scale: Why We Should Care,” Toolbox, September 7, 2021 <https://www.toolbox.com/tech/iot/guest-article/delivering-iot-connectivity-at-scale-why-we-should-care/>
- Lauren Horwitz, “IoT Wireless Connectivity Matures, Industry Watchers Say,” IoT World Today, August 31, 2021 <https://www.iotworldtoday.com/2021/08/31/iot-wireless-connectivity-matures-industry-watchers-say/>

Selected IoT Perspectives Wi-Fi and the Internet of Things

Laying the groundwork for the expected arrival of Wi-Fi 7 (802.11 be) in 2024

- Chris Nerney, “Wi-Fi 7 is coming and Intel makes it sound great,” Network World, September 1, 2021 <https://www.networkworld.com/article/3631911/wi-fi-7-is-coming-and-intel-makes-it-sound-great.html>
- Giacomo Bernardi, “Why 5G won't dethrone Wi-Fi 6 anytime soon at the edge,” IoT Agenda, August 18, 2021 <https://internetofthingsagenda.techtarget.com/post/Why-5G-wont-dethrone-Wi-Fi-6-anytime-soon-at-the-edge>
- Mary Schaklett, “Six ways Wi-Fi 6 will change digital transformation,” Tech Republic, August 11, 2021 <https://www.techrepublic.com/article/six-ways-wi-fi-6-will-change-digital-transformation/>
- Keneetic website, “What you need to know about Wi-Fi 6 (IEEE 802.11ax),” August 6, 2021 <https://help.keenetic.com/hc/en-us/articles/360010536300-What-you-need-to-know-about-Wi-Fi-6-IEEE-802-11ax->
- Claus Hetting, “Massive-scale IoT with Wi-Fi HaLow is now all we need to complete Wi-Fi's perfect trifecta,” Wi-Fi Now, June 25, 2021 <https://wifinowglobal.com/news-and-blog/editorial-massive-scale-iot-with-wi-fi-halow-is-now-all-we-need-to-complete-wi-fis-perfect-trifecta/>
- Eyenetworks website, “Wireless Standards for Wi-Fi and the Internet of Things,” Eyenetworks (Norway) updated on June 10, 2021 <https://eyenetworks.no/en/wireless-standards-wifi-and-iot/>
- David Zomaya, “When to Use 802.11 a, b, g, b, nc: WiFi Standards,” CBT Nuggets, February 10, 2021 <https://www.cbtnuggets.com/blog/technology/networking/when-to-use-802-11-a-b-g-b-nc-wifi-standards>
- Stacey Higginbotham, “Wi-Fi 6E is great, but not for the IoT,” Stacey on IoT, January 10, 2021 <https://staceyoniot.com/wi-fi-6e-is-great-but-not-for-the-iot/>
- Van Winkle, “Wireless evolution: The big tech advances supercharging Wi-Fi 6, 6E, 7,” Venture Beat, September 8, 2020 <https://venturebeat.com/2020/09/08/wireless-evolution-understanding-the-big-tech-advances-of-wi-fi-6-6e-and-7/>
- Richard Edgar, “Wi-Fi 6 is set to change the future of IoT—Here's why,” Wi-Fi Alliance website, July 24, 2020 <https://www.wi-fi.org/beatcon/richard-edgar/wi-fi-6-is-set-to-change-the-future-of-iot-here-s-why>

Research background info (sample): P. Manojkumar, M. Suresh, Alim Al Ayub Ahmed, Hitesh Panchal, Christopher Asir Rajan, A. Dheepanakkavarthi, A. Geetha, B. Gunapriya, Suman Mann & Kishor Kumar Sadasivuni, “A novel home automation distributed server management system using Internet of Things,” International Journal of Ambient Energy, posted online June 7, 2021 DOI: 10.1080/01430750.2021.1953590, <https://doi.org/10.1080/01430750.2021.1953590>; R. Maldonado et al., “Comparing Wi-Fi 6 and 5G Downlink Performance for Industrial IoT,” in IEEE Access, vol. 9, pp. 86928-86937, 2021, available online June 3, 2021 doi: 10.1109/ACCESS.2021.3085896 <https://ieeexplore.ieee.org/abstract/document/9446078>; Le Tian, Serena Santi, Amina Seferagić, Julong Lan, Jeroen Famaey, “Wi-Fi HaLow for the Internet of Things: An up-to-date survey on IEEE 802.11ah research,” Journal of Network and Computer Applications, Volume 182, 2021, 103036, ISSN 1084-8045, <https://doi.org/10.1016/j.jnca.2021.103036> – See Wi-Fi Alliance at <https://www.wi-fi.org/>; Wireless Broadband Alliance <https://wballiance.com/>