



GT CDAIT

Biweekly IoT News Digest (02/22 – 1)

Georgia Tech IoT-related Info/Research Noticed by CDAIT

IoT News and Market Reports

(First Half of February 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/2022-02/IoT_News_Filings_February_2022_First_Half.pdf
- Sample list of **IoT-related market reports** gathered by CDAIT– 85 entries – See: https://cdait.gatech.edu/sites/default/files/2022-02/IoT_Market_Reports_February_2022_First_Half.pdf

- Paola Vargas and Iris Tien, “**Methodology to Quantitatively Assess Impacts of 5G Telecommunications Cybersecurity Risk Scenarios on Dependent Connected Urban Transportation Systems,**” ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, Volume 8 Issue 2 - June 2022 <https://ascelibrary.org/doi/abs/10.1061/AJRUA6.0001220>
- Leigh, Nancy Green, Heonyeong Lee, and Benjamin Kraft, “**Disparities in robot adoption among US manufacturers: a critical economic development challenge,**” Industry and Innovation (published online January 23, 2022): 1-20. <https://doi.org/10.1080/13662716.2021.2007757>

OF NOTE: Ryan Daws, “**Gartner: 25% of consumers will spend 1 hour daily in the metaverse by 2026,**” IoT Tech News, February 8, 2022 <https://iottechnews.com/news/2022/feb/08/gartner-25-of-consumers-spend-1-hour-daily-metaverse-2026/> Box-Steffensmeier, Janet M.; Burgess, Jean; Corbetta, Maurizio; Sugimoto, Cassidy R. [Georgia Tech] et al., “**The future of human behaviour research,**” Nature Human Behavior 6, 15–24 (published online January 27, 2022). <https://doi.org/10.1038/s41562-021-01275-6>

Special Reading Suggestions

- Anna Gross and Tim Bradshaw, “**How SoftBank’s costly bet on the ‘internet of things’ backfired at Arm,**” Financial Times (UK), February 14, 2022 <https://www.ft.com/content/29cbb67e-5e06-4eef-a9dd-a46379b9f8da>
- Elisabetta Severoni, “**The impact of the Internet of Things in the Automotive sector,**” Doxee, February 10, 2022 <https://www.dooxee.com/blog/technology/iot-and-automotive/>
- Jeff Costlow, “**Understand the risk of IoT vulnerabilities in the remote work era,**” SC Magazine, February 4, 2022 <https://www.scmagazine.com/perspective/iot/understand-the-risk-of-iot-vulnerabilities-in-the-remote-work-era>
- Linda Evans, “**IoT: How it is Revolutionizing Our Lives from Every Angle,**” Daily Scanner, February 2, 2022 <https://www.dailyscanner.com/iot-how-it-is-revolutionizing-our-lives-from-every-angle/>

Selected IoT Perspectives The Internet of Things and 5G

“5G technologies catalyze a paradigm shift in the domain of IoT“ (*)

(*) Parag Chatterjee, Robin Singh Bhadoria, and Yadunath Pathak Eds. [Book] “**5G and Beyond – The Future of IoT,**” March 15, 2022 <https://www.routledge.com/5G-and-Beyond-The-Future-of-IoT/Chatterjee-Bhadoria-Pathak/p/book/9780367493295>

- Sean Kinney, “**How is Verizon approaching 5G monetization? With FWA [Fixed Wireless Access], MEC [Mobile Edge Computing], IoT,**” RCR Wireless, February 7, 2022 <https://www.rcrwireless.com/20220207/5g/how-is-verizon-approaching-5g-monetization-with-fwa-mec-iot>
- Jowi Morales, “**6 Ways 5G is Already Changing the World,**” MUO, January 24, 2022 <https://www.makeuseof.com/ways-5g-changing-the-world/>
- GISuser posting, “**5G and IoT Integration: How it can shape our future,**” GISuser, January 21, 2022 <https://gisuser.com/2022/01/5g-and-iot-integration-how-it-can-shape-our-future/>
- Bob O’Donnell, “**IoT For 5G Could Be Next Opportunity,**” Forbes, July 17, 2021 <https://www.forbes.com/sites/bobodonnell/2021/06/17/iot-for-5g-could-be-next-opportunity/?sh=a56796758e6c>
- Ken Briodagh, “**Is 5G Connectivity the Future of IoT?,**” IoT for All, September 21, 2021 <https://www.iotforall.com/5g-future-iot-connectivity>
- 5G Americas, “**5G: The Future of IoT,**” July 2019 <https://www.5gamericas.org/5g-the-future-of-iot/>

Research background info (sample): Abdulrahman Alkandari, Mohammad Alahmad, and Nayef Alwadhhi, “**Overview on 5G and 6G Wireless Communication with IoT Technology,**” Journal of Engineering Science and Technology 17, no. 1 (February 2022): 0095-0105 https://jstec.taylorss.edu.my/Vol%2017%20Issue%201%20February%20%202022/17_1_8.pdf; Javaid, Mohd, Abid Haleem, Shanay Rab, Ravi Pratap Singh, Rajiv Suman, and Sanjay Mohan. “**Progressive schema of 5G for Industry 4.0: features, enablers, and services,**” Industrial Robot: the international journal of robotics research and application (January 19, 2022) <https://www.emerald.com/insight/content/doi/10.1108/IR-10-2021-0226/full/html>; Esenogho EB, Djouani KA, Kurien A. “**Integrating Artificial Intelligence Internet of Things and 5G for Next-Generation Smartgrid: A Survey of Trends Challenges and Prospect,**” IEEE Access. January 6, 2022 <https://ieeexplore.ieee.org/abstract/document/9672084>; Anandaraj, S. P., S. Poornima, R. Vignesh, and Vinayakumar Ravi. “**Industrial Automation of IoT in 5G Era,**” In Secure Communication for 5G and IoT Networks, pp. 85-99. Springer, Cham, 2022 (first on line October 29, 2021) https://link.springer.com/chapter/10.1007/978-3-030-79766-9_6; Datta, Samiran, Sabarna Ghosh Dastidar, and Soumyanil Biswas. “**A comprehensive survey on 5G enabled edge assisted Intelligent Internet of Things framework: issues and challenges,**” International Journal of Innovative Research in Physics 2, no. 2 (January 2, 2021): 1-8 <https://www.ingentaconnect.com/content/smart/ijirp/2021/00000002/00000002/art00001>

See also **5G Alliance** <https://5g-acia.org/>; **5G Americas** <https://www.5gamericas.org/>; **National Spectrum Consortium (NSC)** <https://www.nationalspectrumconsortium.org/>; **5G Infrastructure Association (Europe)** <https://5g-ppp.eu/5g-infrastructure-association/>; **5G Future Networks (GSMA)** https://www.gsma.com/futurenetworks/ip_services/understanding-5g/; **5G Alliance for Connected Industries and Automation (ACIA)** <https://5g-acia.org/>; **5G Automotive Association** <https://5gaa.org/>

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 (incl. post-pandemic) issues – as of 2/15/2022 – 1167 entries:

https://cdait.gatech.edu/sites/default/files/2022-02/Covid-19_IoT_January_2020_February_15_2022.pdf

GOVERNANCE & THE INTERNET OF THINGS

ProPK Staff, “**Pakistan Telecommunication Authority (PTA) Drafts Legal Framework for Short Range Devices and Terrestrial IoT Services**” ProPakistani, February 14, 2022 <https://propakistani.pk/2022/02/14/pta-drafts-legal-framework-for-short-range-devices-and-terrestrial-iot-services/>

Maurice Nagle, “**EU Stands Up to Semiconductor Shortage with European Chips Act,**” IoT Evolution, February 10, 2022 <https://www.iotevolutionworld.com/iot/article/s/451477-eu-stands-up-semiconductor-shortage-with-european-chips.htm>

Mary Shacklett, “**5 ways to improve the governance of unstructured data,**” TechRepublic, February 7, 2022 <https://www.techrepublic.com/article/5-ways-to-improve-the-governance-of-unstructured-data/>

Sojourner Ahébé, “**Study shows rise in telemedicine during the pandemic eliminated a historic racial health gap,**” 90.5 FM WESA Pittsburgh NPR’s News Station, February 7, 2022 <https://www.wesa.fm/health-science-tech/2022-02-07/study-shows-rise-in-telemedicine-during-the-pandemic-eliminated-a-historic-racial-health-gap>

World Economic Forum (WEF), “**Fourth Industrial Revolution Technologies Can Play ‘Game-Changer’ Role in Transforming Cancer Care,**” WEF website, February 4, 2022 <https://www.weforum.org/press/2022/02/first-industrial-revolution-technologies-can-play-game-changer-role-in-transforming-cancer-care>

Stefanie Benson, “**Antitrust in focus - January 2022**” JD Supra, February 1, 2022 <https://www.jdsupra.com/legalnews/antitrust-in-focus-january-2022-3661021/>

Christie Calderwood, “**Smart city technology and the future of policing**” Police1, January 31, 2022 How police can use smart technology to improve community relations (police1.com)