



# GT CDAIT

## Biweekly IoT News Digest (12/21 – 2)

**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 12/31/2021 – 1111 entries:  
[https://cdait.gatech.edu/sites/default/files/2022-01/Covid-19\\_IoT\\_January\\_2020\\_December\\_31\\_2021.pdf](https://cdait.gatech.edu/sites/default/files/2022-01/Covid-19_IoT_January_2020_December_31_2021.pdf)

**GOVERNANCE & THE INTERNET OF THINGS**  
Elizabeth Wallace, “IoT and 2021’s Infrastructure Bill are Well Matched,” RT Insights, December 28, 2021  
<https://www.rtinsights.com/iot-and-2021s-infrastructure-bill-are-well-matched/>

Patrick Suci, “Coming Soon: The Internet of Military Things -- But it is only in the early stage of development,” National Interest, December 23, 2021  
<https://nationalinterest.org/blog/buzz/coming-soon-internet-military-things-198454>

Jeffrey Funk and Lee Vinsel, “We’re living in an age of big tech promises and small results,” Fast Company, December 23, 2021  
[https://www.fastcompany.com/90708339/were-living-in-an-age-of-big-tech-promises-and-small-results?partner=feedburner&utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=feedburner+fastcompany&utm\\_content=feedburner](https://www.fastcompany.com/90708339/were-living-in-an-age-of-big-tech-promises-and-small-results?partner=feedburner&utm_source=feedburner&utm_medium=feed&utm_campaign=feedburner+fastcompany&utm_content=feedburner)

Patrick Howell O’Neill, “The internet runs on free open-source software. Who pays to fix it? Volunteer-run projects like Log4j keep the internet running. The result is unsustainable burnout, and a national security risk when they go wrong,” MIT Technology Review, December 17, 2021  
<https://www.technologyreview.com/2021/12/17/1042692/log4j-internet-open-source-hacking/>

The Policy Times Bureau, “Post covid Devastation Strategic role for Circular Economy to play a lead role for Techno Economic National growth through Smart and Secured Governance,” The Policy Times, December 20, 2021  
<https://thepolicytimes.com/post-covid-devastation-strategic-role-for-circular-economy-to-play-a-lead-role-for-techno-economic-national-growth-through-smart-and-secured-governance/>

Rais Hussin “Integrity-tech to fight corruption,” The Sun Daily [Malaysia], December 15, 2021  
<https://www.thesundaily.my/home/integrity-tech-to-fight-corruption-CJ8658114>

### Georgia Tech IoT-related IoT News and Market Reports Info/Research Noticed by CDAIT

- (Second Half of December 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 – 16 entries – See: [https://cdait.gatech.edu/sites/default/files/2022-01/IoT\\_News\\_Filings\\_December\\_2021\\_Second\\_Half.pdf](https://cdait.gatech.edu/sites/default/files/2022-01/IoT_News_Filings_December_2021_Second_Half.pdf)
- Sample list of IoT-related market reports gathered by CDAIT– 72 entries – See: [https://cdait.gatech.edu/sites/default/files/2022-01/IoT\\_Market\\_Reports\\_December\\_2021\\_Second\\_Half.pdf](https://cdait.gatech.edu/sites/default/files/2022-01/IoT_Market_Reports_December_2021_Second_Half.pdf)
- A. Eid, J. G. D. Hester and M. M. Tentzeris, "Solving the Gain/Coverage Problem to enable 5G-Powered IoT," 2021 Antenna Measurement Techniques Association Symposium (AMTA), 2021, pp. 1-5, online December 6, 2021, doi: 10.23919/AMTA52830.2021.9620574 <https://ieeexplore.ieee.org/abstract/document/9620574>
- GT Institute for People and Technology (IPaT) – See the IPaT Insider, a periodic e-newsletter that highlights IPaT’s research, news, and events <https://research.gatech.edu/ipat/newsletter>
- Georgia Tech Leads Effort to Strengthen State’s Defense Manufacturing Industry [best practices under Industry 4.0 technology standards], GT News Center, December 16, 2021 <https://news.gatech.edu/news/2021/12/16/georgia-tech-leads-effort-strengthen-states-defense-manufacturing-industry>
- Péralte C. Paul, “Georgia Tech Wins Commerce Department Grant to Develop AI Manufacturing Economic Corridor,” GT News Center, December 14, 2021 <https://news.gatech.edu/news/2021/12/14/georgia-tech-wins>

**OF NOTE: 10th edition of the Top 10 Emerging Technologies (2021 issue), created by Scientific American and the World Economic Forum** available at: <https://www.scientificamerican.com/podcast/episode/top-ten-emerging-tech-of-2021/> (December 14, 2021) and <https://www.weforum.org/reports/top-10-emerging-technologies-of-2021> (November 16, 2021)

### Special Reading Suggestions

- Craig Guillot, “Banking’s Role in the Rapidly Growing ‘Internet of Things’ World,” The Financial Brand, December 22, 2021 <https://thefinancialbrand.com/126891/banking-internet-of-things-iot-payments-embedded-commerce-wearable-trend/>
- Vishal Gaur, “Bringing Blockchain, IoT, and Analytics to Supply Chains,” Harvard Business Review, December 21, 2021 <https://hbr.org/2021/12/bringing-blockchain-iot-and-analytics-to-supply-chains>
- Peggy Smedley, “Digital Twin and the Data Tsunami,” Connected World Blog, December 15, 2021 <https://connectedworld.com/digital-twin-and-the-data-tsunami/>

### Selected IoT Perspectives

#### The Internet of Things and Non-Fungible Tokens (NFTs)

*“The creators of NFTs envisioned them as a kind of bragging right that described the relationship between a creator and a member of their audience. When you paid for an NFT, you recorded the fact that you had made a donation to the artist that was inspired by a specific work. That fact was indelibly recorded in a public ledger — the blockchain — so everyone could see it /.../ In the NFT bezzle, NFT “owners” deliberately blur the distinction between owning the right to say you helped an artist and the right to say you own their work. They treat the NFT as equivalent to the image it refers to, rather than a bit of metadata that relates to that image.” Cory Doctorow (\*)*

- Dan Milmo, “NFTs market hits \$22bn as craze turns digital images into assets,” The Guardian (UK), December 16, 2021 [https://www.theguardian.com/technology/2021/dec/16/nfts-market-hits-22bn-as-craze-turns-digital-images-into-assets?mc\\_cid=bbe08f9a1c&mc\\_eid=cf0b0e87e1](https://www.theguardian.com/technology/2021/dec/16/nfts-market-hits-22bn-as-craze-turns-digital-images-into-assets?mc_cid=bbe08f9a1c&mc_eid=cf0b0e87e1)
- Bernard Fickser, “How Non-Fungible Tokens Work: NFTs Explained, Debunked, and Legitimized,” Expensivity, December 11, 2021 <https://www.expensivity.com/how-non-fungible-tokens-work/>
- (\*) Noor Al-Sibai, “Cory Doctorow Roasts NFTs as ‘Massive, Fraud-Ridden Speculative Bubble’ ” Futurism – The Byte, November 9, 2021 <https://futurism.com/the-byte/cory-doctorow-roasts-nfts-massive-speculative-bubble>
- Matthew Gault, “What the Hell Is ‘Right-Clicker Mentality’?,” Vice, November 3, 2021 <https://www.vice.com/en/article/5dgdzed/what-the-hell-is-right-clicker-mentality>
- Harbor Research, “More Than a Meme: NFTs and the IoT,” Harbor Research website, August 10, 2021 <https://harborresearch.com/more-than-a-meme-nfts-and-the-iot/>
- Brandon Vigliarolo, “NFTs cheat sheet: Everything you need to know about non-fungible tokens,” TechRepublic, May 14, 2021 <https://www.techrepublic.com/article/nfts-cheat-sheet-everything-you-need-to-know-about-non-fungible-tokens/>
- Katie, “The Future of 5G, IoT, and NFTs Can Be Connected,” 5G Insider, April 15, 2021 <https://5ginsider.com/uncategorized/the-future-of-5g-iot-and-nfts-can-be-connected/>
- Andrea Ledesma, Jeremy Munro, Erin Canning, and Claire Blechman, “MCN Insights: NFTs are a scam,” The Museum Computer Network (MCN), April 13, 2021 <https://mcn.edu/mcn-insights-nfts-are-a-scam/>

**Research background info (sample):** Qin Wang, Rujia Li, Qi Wang, and Shiping Chen, “Non-Fungible Token (NFT): Overview, Evaluation, Opportunities and Challenges,” arXiv, [Submitted on 16 May 2021 (v1), last revised 25 Oct 2021 (this version, v3)] <https://arxiv.org/abs/2105.07447>; Javier Arcenegui, Rosario Arjona, Roberto Román, and Iluminada Baturone, “Secure Combination of IoT and Blockchain by Physically Binding IoT Devices to Smart Non-Fungible Tokens Using PUFs [Physical Unclonable Functions],” Sensors (Basel). 2021 May; 21(9): 3119, Published online 2021 Apr 30. doi: 10.3390/s21093119 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8125170/>; Omar, Ahmad Sghaier, and Otman Basir. "Capability-Based Non-fungible Tokens Approach for a Decentralized AAA [Authentication, Authorization, Accounting] Framework in IoT." (2020): 7-31. [https://link.springer.com/chapter/10.1007/978-3-030-38181-3\\_2](https://link.springer.com/chapter/10.1007/978-3-030-38181-3_2)