



July 2020 Highlights

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 07/31/20 – 385 entries:

https://cdait.gatech.edu/sites/default/files/s/covid-19_iot_january_july_31_2020.pdf

U.S. CONGRESS & THE INTERNET OF THINGS

Activity in the second quarter: Rep. Richard Hudson (R-NC-8) introduced H.R. 6939 **Advancing IoT Manufacturing Act (5/19/2020)**

<https://www.congress.gov/bill/116th-congress/house-bill/6939?s=1&r=83>

PRIVACY & THE INTERNET OF THINGS

Fifth annual PrivacyCon organized by the Federal Trade Commission (FTC) on July 21, 2020

Session 3: The Internet of Things

Daniel J. Dubois, Northeastern University, *Information Exposure From Consumer IoT Devices: A Multidimensional, Network-Informed Measurement Approach*

Pardis Emami-Naeini, Carnegie Mellon University, *Ask the Experts: What Should Be on an IoT Privacy and Security Label?*

Danny Yuxing Huang, New York University Tandon School of Engineering, *IoT Inspector: Crowdsourcing Labeled Network Traffic from SmartHome Devices at Scale*

Moderator: Phoebe Rouge, Technologist, Federal Trade Commission, Office of Technology Research and Investigation

GT CDAIT Biweekly IoT News Digest (07/20 – 2)

Georgia Tech IoT-related Info/Research Noticed by CDAIT

- Seun Sangodoyin, Frank Werner, Baki B. Yilmaz, Chia-Lin Cheng, Elvan M. Ugurlu, Nader Sehatbakhsh, Milos Prvulovic, and Alenka Zajić, **“Remote Monitoring and Propagation Modeling of EM Side-Channel Signals for IoT Device Security,”** - Published in: 2020 14th European Conference on Antennas and Propagation (EuCAP), Date Added to IEEE Xplore: 08 July 2020, DOI: 10.23919/EuCAP48036.2020.9135387, <https://ieeexplore.ieee.org/abstract/document/9135387> - The authors are with the Schools of Electrical and Computer Engineering; and of Computer Science at Georgia Tech.
- Maria Grammatopoulou, Aris Kanellopoulos, Kyriakos G. Vamvoudakis, Nathan Lau, **“A Multi-step and Resilient Predictive Q-learning Algorithm for IoT with Human Operators in the Loop: A Case Study in Water Supply Networks,”** arXiv:2006.03899v1 [cs.LG], June 6, 2020, <https://arxiv.org/abs/2006.03899> -- A. Kanellopoulos and K. G. Vamvoudakis are with the Daniel Guggenheim School of Aerospace Engineering at Georgia Tech.
- Marilyn A. Brown, **“Geospatial Dimensions of Energy Inefficiency and Equity,”** June 11th presentation for the National Academies’ Geographical Sciences Committee -- article published by the GT Ivan Allen College of Liberal Arts on July 16, 2020: <https://www.iac.gatech.edu/news-events/stories/2020/7/marilyn-brown-presents-national-academies-webinar-ethics-justice-geographical-sciences/636982>. The author is Interim Chair and Regents’ Professor, School of Public Policy at Georgia Tech.

IoT News and Market Reports

(Second Half of July 2020)

- Selected **IoT-related announcements and featured activities/topics in the second half of July 2020** gathered by CDAIT from governments; agencies; consortia; alliances; associations; standards; research and other similar groups around the world – 12 entries – See: https://cdait.gatech.edu/sites/default/files/iot_news_filing_s_july_2020_second_half.pdf
- Sample list of **IoT-related market reports published in the second half of July 2020** gathered by CDAIT– 63 entries – See: https://cdait.gatech.edu/sites/default/files/iot_market_reports_july_2020_second_half.pdf

Special Reading Suggestions

Articles

- Raullen Chai, **“Confidential Computing Will Revolutionize The Internet Of Things,”** IB Times, July 30, 2020 <https://www.ibtimes.com/confidential-computing-will-revolutionize-internet-things-3019376>
- Thorsten Stremmlau, **“The Benefits of Trust in the IoT Era,”** Pipeline, July 2020, Volume 16, Issue 10 <https://www.pipelinepub.com/IoT/trust-in-IoT>

Books

- Alfonso Velosa, Dale Kutnick, Benoit Lheureux, and Roger Williams (analysts), **“Hype Cycle for the Internet of Things, 2020,”** Gartner Research, July 15, 2020 <https://www.gartner.com/en/documents/3987602/hype-cycle-for-the-internet-of-things-2020>
- Leonard T. Nuara, **“Internet of Things 2020: Everything is Connected,”** Practising Law Institute (PLI), Course Handbook, June 2020, ISBN: 978-1-4024-3662-8, 750 pages, <https://www.pli.edu/programs/internet-of-things/chb?book=BK11489>

Selected IoT Perspectives

The Internet of Things and the customer service redefinition

“Because of this latency (of legacy call-center models), it’s no wonder that 44 percent of Americans would prefer to scrub a toilet than talk with customer service.” ()*

- Priya Dialanai Sharma **“How the Internet of Things is Changing Customer Service?”** Analytics Insight, July 1, 2020, <https://www.analyticsinsight.net/internet-things-changing-customer-service/> ;
- Jia Jen Low, **“Is digital transformation being ‘rushed’ amid COVID-19 pressure? [About 9 out of ten companies indicated customer service as their main focus,]”** Techq, May 29, 2020 <https://techhq.com/2020/05/are-dx-projects-during-covid-19-going-to-end-up-rushed-and-botched/>
- Sukand Ramachandran, Derek Hayes, Nicholas Clark, and Hrvoje Jenkač, **“Redefining Customer Service for the Future,”** Boston Consulting Group, May 28, 2020 <https://www.bcg.com/en-us/publications/2020/redefining-customer-service-for-the-future.aspx>
- Sebastian Bott, **“IoT Customer Service Strategies for Internet of Things Innovators,”** B2X Blog, August 28, 2019 <https://blog.b2x.com/iot-customer-service>

(*) Elaina Ransford, **“Why IoT Will Enable a New, Data-Driven Era of Customer Service,”** Help Shift, June 7, 2019 <https://www.helpshift.com/blog/why-iot-in-customer-service-is-massive/> – Source of survey (44 percent etc): <https://www.helpshift.com/press/helpshift-survey-finds-44-percent-of-americans-would-rather-scrub-a-toilet-than-call-customer-support/>

Georgia Tech Center for the Development and Application of Internet of Things Technologies

www.cdait.gatech.edu

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