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Topic Resources

Here is the listing of the URL's that are on my webpage for the Emerging Technologies assignment.

You may research the topic on their own. However below is a list resources that might help you.

AICPA data standards

<https://www.aicpa.org/interestareas/frc/assuranceadvisoryservices/pages/auditdatastandards.aspx>

Artificial intelligence:

"AI: welcome to the machines"

http://www.ey.com/gl/en/services/assurance/ey-reporting-ai-welcome-to-the-machines?utm_source=Weekly%20Chronicle&utm_medium=Email&utm_campaign=Reporting%3A%20June%202017

Forbes website: "Top 10 Hot Artificial Intelligence (AI) Technologies"

<https://www.forbes.com/sites/gilpress/2017/01/23/top-10-hot-artificial-intelligence-ai-technologies/#3f6199691928>

Entrepreneur website: "4 AI Technologies Impacting Business Operations Right Now"

<https://www.entrepreneur.com/article/284838>

Journal of Accountancy website: "Rethinking the audit"

<http://www.journalofaccountancy.com/issues/2017/apr/rethinking-the-audit.html>

What Artificial Intelligence Can and Can't Do Right Now by Andrew Ng *Harvard Business Review*, November 9, 2016 <https://hbr.org/2016/11/what-artificial-intelligence-can-and-cant-do-right-now>

Don't fear superintelligent AI by Grady Booch 10:20 Feb

2017 https://www.ted.com/talks/grady_booch_don_t_fear_superintelligence

Augmented reality and virtual reality:

The augmented enterprise: increasingly becoming a reality

https://sharecontent.ey.net/cms/ThoughtLeadership/Shared%20Documents/2016/04/13/EY_HotTopic_Augmented_Reality.pdf

Forbes website: “How Virtual Reality Will Impact Business In The Next Five Years”

<https://www.forbes.com/sites/forbestechcouncil/2016/07/22/how-virtual-reality-will-impact-businesses-in-the-next-five-years/#3919e0de2607>

Big data ethics (including data privacy):

Forbes website: “What’s Up with Big Data Ethics?”

<https://www.forbes.com/sites/oreillymedia/2014/03/28/whats-up-with-big-data-ethics/#274699743591>

Journal of Accountancy website: “Why accountants should own Big Data”

<http://www.journalofaccountancy.com/issues/2013/nov/20138590.html>

Association of Chartered Certified Accountants and Institute of Management Accountants: “Big data: Its power and perils”

<http://www.accaglobal.com/bigdata>

Big data storage (e.g., data lakes):

Computer Weekly.com website: “Big data storage: Defining big data and the type of storage it needs”

- <http://www.computerweekly.com/podcast/Big-data-storage-Defining-big-data-and-the-type-of-storage-it-needs>

Forbes website: “Why Data Lakes Are Evil” <https://www.forbes.com/sites/danwoods/2016/08/26/why-data-lakes-are-evil/#71b07a454f73>

Blockchain (internet of value) and cryptocurrencies (bitcoin):

“The next big thing: Blockchain”

<http://www.ey.com/sg/en/issues/ey-spotlight-on-business-issue-2-2016-the-next-big-thing-blockchain>

“Blockchain and the future of audit”

<http://www.ey.com/gl/en/services/assurance/ey-reporting-blockchain-and-the-future-of-audit>

“Blockchain’s potential win for the energy sector”

<https://betterworkingworld.ey.com/better-questions/blockchain-energy>

Blockchain technology as a platform for digitization: implications for the insurance industry

[http://www.ey.com/Publication/vwLUAssets/EY-blockchain-technology-as-a-platform-for-digitization/\\$File/EY-blockchain-technology-as-a-platform-for-digitization.pdf](http://www.ey.com/Publication/vwLUAssets/EY-blockchain-technology-as-a-platform-for-digitization/$File/EY-blockchain-technology-as-a-platform-for-digitization.pdf)

“Blockchain reaction: Tech plans for critical mass” <http://www.ey.com/gl/en/industries/technology/ey-blockchain-reaction-tech-plans-for-critical-mass>

“Building blocks of the future”

<http://www.ey.com/gl/en/services/assurance/ey-reporting-building-blocks-of-the-future>

Implementing blockchains and distributed infrastructure [http://www.ey.com/Publication/vwLUAssets/EY-implementing-blockchains-and-distributed-infrastructure/\\$FILE/EY-implementing-blockchains-and-distributed-infrastructure.pdf](http://www.ey.com/Publication/vwLUAssets/EY-implementing-blockchains-and-distributed-infrastructure/$FILE/EY-implementing-blockchains-and-distributed-infrastructure.pdf)

Bitcoin Magazine website: Blockchain Commercialization: Real World Applications Get Real
<https://bitcoinmagazine.com/articles/blockchain-commercialization-real-world-applications-get-real/>

strategy+business website: "A Strategist's Guide to Blockchain"

<http://www.strategy-business.com/article/A-Strategists-Guide-to-Blockchain>

Thompson Reuters website: "Blockchain, Accounting and Audit: What Accountants Need to Know"

<https://tax.thomsonreuters.com/blog/business/technology/blockchain-accounting-and-audit-what-accountants-need-to-know/>

economia website: "How blockchain will impact accountants and auditors"

<http://economia.icaew.com/features/july-2016/how-blockchain-will-impact-accountants-and-auditors>

SF Strategic Finance website: "Get Ready for Blockchain"

<http://sfmagazine.com/post-entry/january-2017-get-ready-for-blockchain/>

NASDAQ.com website: "Blockchain Promises Accountants, Auditors and Their Clients Better Data Sooner And Cheaper"

<http://www.nasdaq.com/article/blockchain-promises-accountants-auditors-and-their-clients-better-data-sooner-and-cheaper-cm726746>

Innovation Enterprise website: "Will Blockchain Render Accountants Irrelevant?"

<https://channels.theinnovationenterprise.com/articles/will-blockchain-render-accountants-irrelevant>

The Blockchain and Us (2017) 30 minute film <http://blockchain-documentary.com>

Toyota Joins Coalition to Bring Blockchain Networks to Smart Cars by Philip E. Ross *IEEE Spectrum* May 24, 2017 <http://spectrum.ieee.org/cars-that-think/computing/networks/toyota-joins-coalition-to-bring-blockchain-networks-to-smart-cars>

What is blockchain? By Lou Carlozo July 1, 2017 *Journal of Accountancy* <http://www.journalofaccountancy.com/issues/2017/jul/what-is-blockchain.html>

Real talk about artificial intelligence and blockchain by Jeff Drew July 1, 2017 *Journal of Accountancy* <http://www.journalofaccountancy.com/issues/2017/jul/technology-roundtable-artificial-intelligence-blockchain.html>

How the blockchain will radically transform the economy by Bettina Warburg Nov 2016 14:57 https://www.ted.com/talks/bettina_warburg_how_the_blockchain_will_radically_transform_the_economy

We've stopped trusting institutions and started trusting strangers by Rachel Botsman Oct 2016
17:08 https://www.ted.com/talks/rachel_botsman_we_ve_stopped_trusting_institutions_and_started_trusting_strangers

How blockchain is changing money and business by Don Tapscott Aug 2016
18:49 https://www.ted.com/talks/don_tapscott_how_the_blockchain_is_changing_money_and_business

Responsibility Without Power? The Governance of Mutual Distributed Ledgers (aka Blockchain) <http://www.zyen.com/who-we-do/people/5-about-zyen/team/1612-simon-mills.html>

Cloud computing, including infrastructure as a service (IAAS), software as a service (SAAS) and platform as a service (PAAS):

“Cloud taxation issues and impacts”

<http://www.ey.com/gl/en/industries/technology/cloud-taxation-issues-and-impacts>

“Worldwide digital tax guide”

<http://www.ey.com/gl/en/services/tax/ey-digital-tax-guide>

“Governing the cloud”

<http://www.ey.com/gl/en/services/advisory/governing-the-cloud>

Cognitive computing:

- *Forbes website*: “What Everyone Should Know About Cognitive Computing”
<https://www.forbes.com/sites/bernardmarr/2016/03/23/what-everyone-should-know-about-cognitive-computing/#6be118675088>

Continuous auditing and monitoring:

- AICPA website: “The Current State of Continuous Auditing and Continuous Monitoring”
https://www.aicpa.org/InterestAreas/FRC/AssuranceAdvisoryServices/DownloadableDocuments/Whitepaper_Current-State-Continuous-Auditing-Monitoring.pdf

Dark data and dark analytics:

- Gartner website: “Dark Data”
<http://www.gartner.com/it-glossary/dark-data>
- Bloomberg website: “Dark Data Management: The Next Frontier in Information Governance”
<https://www.bloomberg.com/company/announcements/dark-data-management-next-frontier-information-governance/>
- ▶ The next frontier in data analytics by Norbert Tschakert, Julia Kokina, Stephen Kozlowski, and Miklos Vasarhelyi August 1, 2016 *Journal of Accountancy* <http://www.journalofaccountancy.com/issues/2016/aug/data-analytics-skills.html>
- ▶ **New in Data and Analytics**
<http://sloanreview.mit.edu/big-ideas/data-analytics/>
- ▶ **Data analytics: A high-level introduction for accounting practitioners** by Andrew M. Bauer May 1, 2017 *The Tax Adviser* <http://thetaxadviser.com/issues/2017/may/data-analytics-accounting-practitioners.html>
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Drones:

- EY website: “EY scaling the use of drones in the audit process”
http://www.ey.com/lu/en/newsroom/news-releases/news_20170626-ey_scaling_the_use_of_drones_in_the_audit_process

Internet of Things (IOT), Internet of People and sensors:

- ▶ “Human-machine interactions that unlock possibilities in media and entertainment”
<http://www.ey.com/gl/en/industries/media--entertainment/ey-internet-of-things>
- ▶ “Helping demystify Industrie 4.0 and IoT: an intro to the world of machine-to-machine talk”
<https://cioblog.ey.com/2016/02/22/helping-demystify-industrie-4-0-and-iot-an-intro-to-the-world-of-machine-to-machine-talk/>
- ▶ “The power of the IoT: how oil and gas CIOs can introduce intelligence into the supply chain” <https://cioblog.ey.com/2015/11/23/the-power-of-the-iot-how-oil-and-gas-cios-can-introduce-intelligence-into-the-supply-chain/>

- ▶ *AICPA website*: “How the Internet of Things will impact CPAs”
http://www.aicpastore.com/Content/media/PRODUCER_CONTENT/Newsletters/Articles_2015/CPA/MAY/impact_CPAs.jsp
- ▶ *Harvard Business Review website*: “How People Are Actually Using the Internet of Things”
<https://hbr.org/2015/10/how-people-are-actually-using-the-internet-of-things>
- ▶ *NPR website*: “The Internet Of Things Is Becoming More Difficult To Escape”
<http://www.npr.org/sections/alltechconsidered/2017/06/06/531747037/the-internet-of-things-is-becoming-more-difficult-to-escape>
- ▶ *The Guardian website*: “Forget the internet of things – we need an internet of people”
<https://www.theguardian.com/technology/2015/may/25/forget-internet-of-things-people>

Machine learning:

- *AccountingWEB website*: “The State of AI, Machine Learning, and Accounting”
<https://www.accountingweb.com/technology/trends/the-state-of-ai-machine-learning-and-accounting>

Natural language processing and natural language generation, text analytics, and sentiment analysis and chat apps (conversational bots and virtual agents):

- ▶ “Your customers are trying to text you something. Are you listening?”
<https://betterworkingworld.ey.com/better-questions/customers-text-listening>
- *Harvard Business Review website*: “Sentiment Analysis Can Do More than Prevent Fraud and Turnover”
<https://hbr.org/2016/01/sentiment-analysis-can-do-more-than-prevent-fraud-and-turnover>
- *ACCA website*: Text analytics mines corporate reports for fraud
<http://www.accaglobal.com/us/en/member/member/accounting-business/2016/02/insights/text-analytics.html>

Neural networks, deep neural networks and deep learning:

- *Forbes website*: “Why Is Deep Learning Is Suddenly Changing Your Life”
- <http://fortune.com/ai-artificial-intelligence-deep-machine-learning/>

Robotic process automation (RPA), automation, and man and machine

- ▶ “What is Robotic Process Automation?”
http://players.brightcove.net/1066292269001/BJmSIObm_default/index.html?videoId=5206910658001

- ▶ *Robotic process automation: automation's next frontier*
[http://www.ey.com/Publication/vwLUAssets/ey-robotic-process-automation/\\$FILE/ey-robotic-process-automation.pdf](http://www.ey.com/Publication/vwLUAssets/ey-robotic-process-automation/$FILE/ey-robotic-process-automation.pdf)
- ▶ “Will robots change the future of outsourcing? Is Robotic Process Automation (RPA) the new Business Process Outsourcing (BPO)?”
<https://cioblog.ey.com/2017/02/06/will-robots-change-the-future-of-outsourcing-is-robotic-process-automation-rpa-the-new-business-process-outsourcing-bpo/>

- ▶ “Digital disruption: intelligent tax automation”
http://www.ey.com/gl/en/issues/webcast_2017-06-29-1100_digital-disruption-intelligent-tax-automation
- ▶ “Get ready for robots”
<http://www.ey.com/gl/en/industries/financial-services/insurance/ey-get-ready-for-robots>
- ▶ *Robotic process automation in the Finance function of the future*
[http://www.ey.com/Publication/vwLUAssets/EY-robotic-process-automation-in-the-finance-function-of-the-future/\\$FILE/EY-robotic-process-automation-in-the-finance-function-of-the-future.pdf](http://www.ey.com/Publication/vwLUAssets/EY-robotic-process-automation-in-the-finance-function-of-the-future/$FILE/EY-robotic-process-automation-in-the-finance-function-of-the-future.pdf)
- ▶ “Tax workers and robots: teammates, not enemies”
<https://betterworkingworld.ey.com/digital/tax-workers-and-robots-teammates-not-enemies>
- ▶ “Analytics and intuition: Why health care big data needs both”
<https://betterworkingworld.ey.com/better-questions/analytics-intuition-healthcare-big-data>
- ▶ *Forbes website: Looking Ahead: How Automation Will Change The Accounting Industry*
<https://www.forbes.com/sites/forbesfinancecouncil/2017/05/16/looking-ahead-how-automation-will-change-the-accounting-industry/#320dcb4e7f30>
- ▶ <https://www.youtube.com/watch?v=tnUSN2JLDOI>

Speech recognition:

- ▶ *Audio analytics: new opportunities in litigation and investigation*
[http://www.ey.com/Publication/vwLUAssets/ey-audio-analytics/\\$FILE/ey-audio-analytics.pdf](http://www.ey.com/Publication/vwLUAssets/ey-audio-analytics/$FILE/ey-audio-analytics.pdf)