Generalization & Democratization of
Artificial Intelligence & Machine Learning

Extended Resources

1. This TEDxTalk, given by Dr. Ben Goertzel, illustrates some of the most pressing issues of artificial intelligence in today's world. Dr. Goertzel, CEO of SingularityNET, details the importance of advancing and improving the human experience through a decentralized platform of artificial agents which may ultimately lead to the "singularity" of artificial general intelligence.

2. https://www.youtube.com/watch?v=r4manxX5U-0

3. Fig. 1.1: Agent Interaction. Montes, G. A., & Goertzel, B. (2019). Retrieved October 7, 2020.

4. Fig 1.2: Silo Based Decision Tree Model. Schofield, M., & Thielscher, M., (2019). Retrieved October 15, 2020.

5. Fig 1.3: Conceptual Model For Simulated Recall. Nadji-Tehrani, M., & Eslami, A. (2020). Retrieved October 15, 2020.

6. Fig. 1.4: Basic Neural Network. Zhou, V. (2019, March 3). Retrieved October, 13, 2020.

7. Another TEDxTalk, given by Karen Hao, details the catastrophic effects of artificial intelligence including: deep fakes, job-search discrimination, facial recognition, etc. Hao details the historical success of the improvement in car safety through the adoption and regulation of seatbelts and uses this example to show how the development of AI is outpacing its regulation. Hao proposes that regulation and the evaluation of the technology's impact should happen before the technology is released instead of after.
   a. https://www.youtube.com/watch?v=D28aL_5LH2Q

8. Podcast conversation discussing artificial general intelligence between Dr. Lex Fridman (MIT) and Dr. Ilya Sutskever (OpenAI). The discussion is around the current AI technologies that have seen advancements toward and possible next steps of technology needed to achieve AGI. There is also discussion of the concepts that define AGI such as intelligence, consciousness, and creativity. https://www.youtube.com/watch?v=i0UyKsAEaNI

9. Presentation by Dr. Danny Lange (Unity Technologies) about the role that modern game engines play in developing simulations to train AI. https://www.youtube.com/watch?v=BByWWTdNI0Y

10. Presentation by employees of Tesla, including Elon Musk, on Tesla vehicle autonomy
    a. https://www.youtube.com/watch?v=Ucp0TTmvqOE&t=8930s

11. Fig. 1.5: Front-facing Portion of Tesla Autopilot System. Tesla (2020). Retrieved October 15, 2020

12. . *AutoML* – Google Cloud AutoML product description:

13. https://cloud.google.com/automl/

14. *Azure* – Microsoft Azure product description:

15.   https://azure.microsoft.com/en-us/services/machine-learning/

16. *ageMaker* – Amazon SageMaker product description:

17.   https://aws.amazon.com/sagemaker/

18. The article reflects on varies ways of changing privacy within the concept of law and how it   pertains to data protection with laws and its regulations. It also goes into how the law   creates social developments with the use of technology.

19.   https://link.springer.com/chapter/10.1007/978-3-476-04860-8_11

20. An article about current AI & ML during the current COVID pandemic.

21.   https://federalnewsnetwork.com/open-first/2019/09/the-democratization-of-artificial-intelligence-and-machine-learning/

22. A video explaining some of the limitations and increasing deployment of AI
     https://www.youtube.com/watch?v=8cbxii7obvc

23. An Edureka session (Youtube video) that will help you understand the positive impact of Artificial Intelligence in the healthcare domain along with practical implementation in Python.
     https://www.youtube.com/watch?v=j6EB9HO6acE

24. A short article on ML in healthcare
    i.   https://intersog.com/blog/how-machine-learning-will-change-healthcare/

25. A research article that discusses many uses in which interpretable machine learning models are needed in healthcare and how they should be deployed.
    a.   https://dl.acm.org/doi/abs/10.1145/3233547.3233667

26. A research article that provides more backgrounds and context to the DDS LANDS system.

https://www.researchgate.net/publication/334363106_An_Agricultural_Prototype_DSS_LANDS_for_monitoring_the_main_crop_productions_in_Sardinia