

Suggested Readings

Three different degrees of reproducibility:

1. Experiment reproducibility
2. Data reproducibility
3. Method reproducibility

For a description, see: <https://aaai.org/ocs/index.php/AAAI/AAAI18/paper/view/17248>

For recommendations on how to make AI reproducible: https://folk.idi.ntnu.no/odderik/RAI-2019/On_Reproducible_AI-preprint.pdf

Reproducibility:

1. Deep Reinforcement Learning that Matters: <https://aaai.org/ocs/index.php/AAAI/AAAI18/paper/view/16669>
2. Reproducibility of Deep Reinforcement Learning methods <https://www.openreview.net/forum?id=BJNuErQX-¬eId=BJNuErQX->
3. Half of psychology studies fail reproducibility test, <https://www.nature.com/news/over-half-of-psychology-studies-fail-reproducibility-test-1.18248>
4. How to better create reproducible results: <https://dl.acm.org/citation.cfm?id=2213908>
5. P-hacking and why many of the published research is wrong: <https://www.youtube.com/watch?v=42QuXLuCH3Q>
6. Article on statistical significance: <https://www.nature.com/articles/s41562-017-0189-z.epdf>
7. <http://www.nature.com/news/how-scientists-fool-themselves-and-how-they-can-stop-1.18517>
8. Improving reproducibility: <https://www.youtube.com/watch?v=xGLF6oIIZYY&t=25s>
9. Reproducibility, Reusability, and Robustness in Deep Reinforcement Learning, ICLR 2018: <https://youtu.be/Vh4H0gOwdlg>
10. Unreproducible Research is Reproducible: <http://proceedings.mlr.press/v97/bouthillier19a.html>
11. Are GANs created equal? A Large Scale Study: <https://papers.nips.cc/paper/7350-are-gans-created-equal-a-large-scale-study.pdf>

Tools and software that helps to reproduce research:

1. Coda Lab: <http://codalab.org/>
2. BEAT platform: <https://www.beat-eu.org/platform/>
3. COCO: <http://coco.gforge.inria.fr/>

Other attempts in making research more reproducible:

1. Rescience: <https://rescience.github.io/>
2. The reproducibility project: <http://www.nature.com/news/cancer-reproducibility-project-releases-first-results-1.21304>
3. ACM Sigmod reproducibility: <http://db-reproducibility.seas.harvard.edu/>
4. Journal of Statistical Software: <https://www.jstatsoft.org/pages/view/mission>

AAAI 2019 Workshop on Reproducible AI: <https://folk.idi.ntnu.no/odderik/RAI-2019/>

ICML 2018 Workshop on Enabling Reproducibility in Machine Learning:
<https://mltrain.cc/events/enabling-reproducibility-in-machine-learning-mltrainrml-icml-2018/>

ICML 2017 reproducibility workshop: <https://sites.google.com/view/icml-reproducibility-workshop/icml2017>

Submitted and accepted papers at the reproducibility workshop:
<https://openreview.net/group?id=ICML.cc/2017/RML>

ICLR 2018 Reproducibility Challenge:
<https://www.cs.mcgill.ca/~jpineau/ICLR2018-ReproducibilityChallenge.html>

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