Week 1 Optional References

Week 1: Overview of the ML Lifecycle and Deployment

If you wish to dive more deeply into the topics covered this week, feel free to check out these optional references. You won't have to read these to complete this week's practice quizzes.

[Concept and Data Drift](#)

[Monitoring ML Models](#)

[A Chat with Andrew on MLOps: From Model-centric to Data-centric](#)

Papers

Konstantinos, Katsiapis, Karmarkar, A., Altay, A., Zaks, A., Polyzotis, N., … Li, Z. (2020). Towards ML Engineering: A brief history of TensorFlow Extended (TFX). http://arxiv.org/abs/2010.02013

Paleyes, A., Urma, R.-G., & Lawrence, N. D. (2020). Challenges in deploying machine learning: A survey of case studies. http://arxiv.org/abs/2011.09926

Sculley, D., Holt, G., Golovin, D., Davydov, E., & Phillips, T. (n.d.). Hidden technical debt in machine learning systems. Retrieved April 28, 2021, from Nips.c https://papers.nips.cc/paper/2015/file/86df7dcfd896fcaf2674f757a2463eba-Paper.pdf

Week2

Week 2 Optional References

Week 2: Select and Train Model

If you wish to dive more deeply into the topics covered this week, feel free to check out these optional references. You won't have to read these to complete this week's practice quizzes.
[Establishing a baseline](#)

[Error analysis](#)

[Experiment tracking](#)

Papers

Brundage, M., Avin, S., Wang, J., Belfield, H., Krueger, G., Hadfield, G., … Anderljung, M. (n.d.). Toward trustworthy AI development: Mechanisms for supporting verifiable claims∗. Retrieved May 7, 2021http://arxiv.org/abs/2004.07213v2

Nakkiran, P., Kaplun, G., Bansal, Y., Yang, T., Barak, B., & Sutskever, I. (2019). Deep double descent: Where bigger models and more data hurt. Retrieved from http://arxiv.org/abs/1912.02292

Week 3

Week 3 Optional References

Week 3: Data Definition and Baseline

If you wish to dive more deeply into the topics covered this week, feel free to check out these optional references. You won't have to read these to complete this week's practice quizzes.

[Label ambiguity](#)

[Data pipelines](#)

[Data lineage](#)

[MLops](#)

Geirhos, R., Janssen, D. H. J., Schutt, H. H., Rauber, J., Bethge, M., & Wichmann, F. A. (n.d.). Comparing deep neural networks against humans: object recognition when the signal gets weaker∗. Retrieved May 7, 2021, from Arxiv.org website: https://arxiv.org/pdf/1706.06969.pdf

References

Introduction to Machine Learning in Production

This is a compilation of resources including URLs and papers appearing in lecture videos.

Overall resources:

Konstantinos, Katsiapis, Karmarkar, A., Altay, A., Zaks, A., Polyzotis, N., … Li, Z. (2020). Towards ML Engineering: A brief history of TensorFlow Extended (TFX). http://arxiv.org/abs/2010.02013

Paleyes, A., Urma, R.-G., & Lawrence, N. D. (2020). Challenges in deploying machine learning: A survey of case studies. http://arxiv.org/abs/2011.09926

Week 1: Overview of the ML Lifecycle and Deployment

Concept and Data Drift

Monitoring ML Models

A Chat with Andrew on MLOps: From Model-centric to Data-centric AI

Konstantinos, Katsiapis, Karmarkar, A., Altay, A., Zaks, A., Polyzotis, N., … Li, Z. (2020). Towards ML Engineering: A brief history of TensorFlow Extended (TFX). http://arxiv.org/abs/2010.02013

Paleyes, A., Urma, R.-G., & Lawrence, N. D. (2020). Challenges in deploying machine learning: A survey of case studies. http://arxiv.org/abs/2011.09926

Sculley, D., Holt, G., Golovin, D., Davydov, E., & Phillips, T. (n.d.). Hidden technical debt in machine learning systems. Retrieved April 28, 2021, from Nips.cc

https://papers.nips.cc/paper/2015/file/86df7dcfd896fcaf2674f757a2463eba-Paper.pdf

Week 2: Select and Train Model

Establishing a baseline

Error analysis

Experiment tracking

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Nakkiran, P., Kaplun, G., Bansal, Y., Yang, T., Barak, B., & Sutskever, I. (2019). Deep double descent: Where bigger models and more data hurt. Retrieved from http://arxiv.org/abs/1912.02292

Week 3: Data Definition and Baseline

Label ambiguity

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