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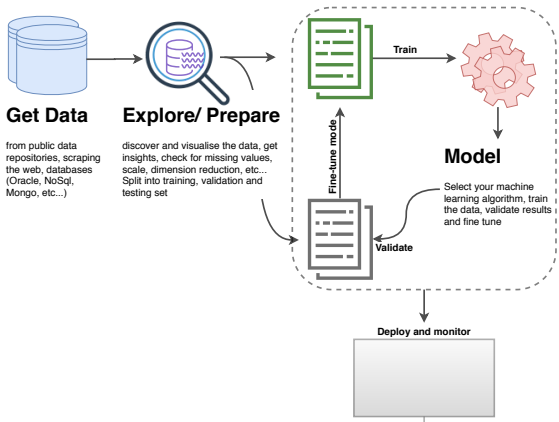
Data-Driven Project (*End-to-End*)

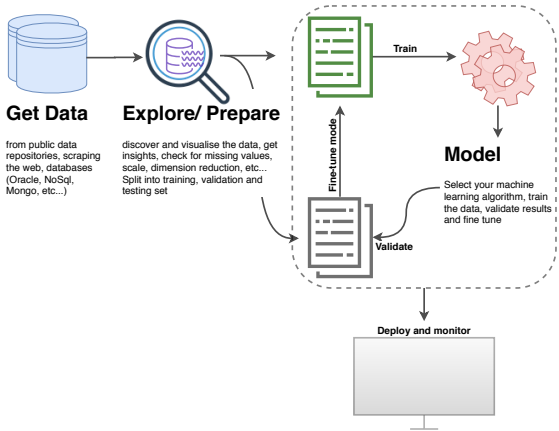
Data Driven Project

- Obtain a dataset
- Explore and prepare
- Select and model
- Train, validate
- Fine-tune your model
- Deploy



Deploy Your Solution

- Amazon SageMaker
- Docker & Kubernetes
- Flask
- . . .



Good Read https://christophergs.com/machine%20learning/2019/03/17/how-to-deploy-machine-learning-models/

Why?

- Easy to use and quick way to create and share data driven apps. If you know Python, almost no learning curve

Learning Resources

- Wide range of examples with code[1] and great community support [2]

[1] https://www.streamlit.io/gallery
[2] https://discuss.streamlit.io/

streamlit

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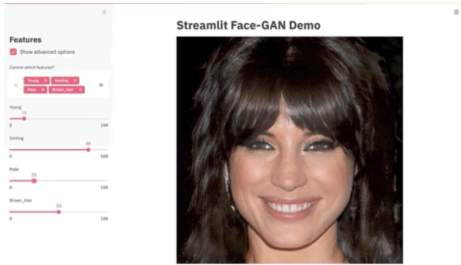

[Source: https://github.com/streamlit/demo-face-gan]

[1] https://www.streamlit.io/gallery
[2] https://discuss.streamlit.io/

Today's Session

- Install *streamlit*, run existing built-in demos and explore code[3]
- Complete example (Face Recognition and Support Vector Machine) [4]
- Simple task (load and visualise a dataset using *streamlit*. This is part of a full example on exploring covid19 related data[5]

[3] https://docs.streamlit.io/en/stable/
[4] https://github.com/heyad/python-user-group-abdn
[5] https://github.com/heyad/covid19World

Python Resources

- Books, videos, Code https://github.com/academic/awesome-datascience
- More in-depth (Research): Papers with Code https://paperswithcode.com/

Thank You

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