Resources

Data

Fair Principles. https://www.go-fair.org/fair-principles/
European Open Science Cloud - resources for the Medical & Health Sciences. https://marketplace.eosc-portal.eu/services?scientific_domains=38

UK Biobank. https://www.ukbiobank.ac.uk
Broad Bioimage Benchmark Collection. https://bbbc.broadinstitute.org
Collection of Public Biology Data Sets. https://github.com/awesomedata/awesome-public-datasets#biology

Know your data. https://knowyourdata.withgoogle.com

Wie viele Daten braucht KI? (in German). https://machinelearning-blog.de/grundlagen/daten-kuenstliche-intelligenz/

Lecture on Free and Open Technologies (Christoph Derndorfer and Lukas F. Lang, TU Wien, 2019/2020). https://free-and-open-technologies.github.io

AI / Machine Learning

KI-Campus. https://ki-campus.org/overview?locale=en
Elements of AI. https://course.elementsofai.com, https://buildingai.elementsofai.com
AI for Beginners tutorial by LMU. https://trainingnns.github.io

Plus magazine articles on ML and NNs. https://plus.maths.org/content/rise-machines, https://plus.maths.org/content/maths-minute-artificial-neurons

Teachable Machine. https://teachablemachine.withgoogle.com
Playground (TensorFlow). https://playground.tensorflow.org/

Programming

Kaggle courses. https://www.kaggle.com/learn
Software Carpentry (exemplary course). https://swcarpentry.github.io/python-novice-inflammation/

NumPy. https://numpy.org/learn/
Pandas. https://pandas.pydata.org/docs/user_guide/index.html
Scikit-image. https://scikit-image.org/docs/stable/auto_examples/
Scikit-learn. https://scikit-learn.org/stable/
TensorFlow resources. https://www.tensorflow.org
Keras resources. https://keras.io/getting_started/intro_to_keras_for_engineers/

Data visualisation: plotly express. https://plotly.com/python/plotly-express/
Data visualisation: matplotlib. https://matplotlib.org/stable/gallery/index.html

Mentioned in the Course Material

Video: A brief history of AI (Lernende Systeme). https://www.youtube.com/watch?v=yaL5ZMvRRqE
Video: Deep Fake Barack Obama. https://www.youtube.com/watch?v=cQ54GDm1eL0
Which face is real (GANs). https://www.whichfaceisreal.com/index.php
DeepArt (Style Transfer). https://deepart.io
Data Bias. https://twitter.com/Chicken3gg/status/1274314622447820801
CNNs - convolution. https://twitter.com/3blue1brown/status/1303489896519139328?s=20
Distill - Feature Visualisation. https://distill.pub/2017/feature-visualization/

HHU

KI für alle lecture (in German). https://mediathek.hhu.de/playlist/388

Resources on CAI webpage. https://www.cai.hhu.de/service/serviceseiten/online-resources
medRSD workshops. https://www.graduiertenzentrum-medizin.hhu.de/workshops/terminuebersicht
iGRAD workshops. https://www.igrad.hhu.de/en/course-offers/workshop-programme

Gorilla data. https://www.hhu.de/en/news-article/missing-the-gorilla-for-the-hypotheses