

AI self-study plan for managers

First-order principles

What AI can and can not do? How does it work? What is the idea behind “learning from data”? What are the scientific foundations?

General description of AI and capabilities

1. <https://www.coursera.org/learn/ai-for-everyone>
2. <https://nerdist.com/article/robert-downey-jr-ai-documentary-series/>
3. <https://medium.com/hackernoon/the-product-data-fit-strategy-9d34bc8183ca>
4. <https://deepindex.org/>
5. <https://www.mckinsey.com/business-functions/mckinsey-analytics/our-insights/an-executives-guide-to-ai>

Scientific background

1. <https://www.amazon.com/Master-Algorithm-Ultimate-Learning-Machine-ebook/dp/B012271YB2>
2. <https://www.coursera.org/learn/machine-learning>
3. <https://www.coursera.org/specializations/deep-learning>

Economy of AI

What processes in the value chain AI is changing? Where is the added value? How to calculate business benefits are related to timings?

1. <https://www.amazon.com/Prediction-Machines-Economics-Artificial-Intelligence/dp/1633695670>
2. <https://www.amazon.com/Competing-Age-AI-Leadership-Algorithms/dp/1633697622>
3. <https://www.gsb.stanford.edu/sites/default/files/publication-pdf/vcii-white-paper-value-chain-innovation-promise-ai.pdf>
4. <https://assets.kpmg/content/dam/kpmg/xx/pdf/2018/09/rethinking-the-value-chain.pdf>
5. <https://www.nber.org/books/agra-1>
6. <https://thegradient.pub/the-economics-of-ai-today/>

Product management

How to make a product that uses AI? How to make people use it and trust it? How to turn AI metrics into product metrics?

1. <https://pair.withgoogle.com/guidebook>

2. <https://www.ibm.com/design/ai/>
3. <https://www.udacity.com/course/ai-product-manager-nanodegree--nd088>
4. <https://medium.com/google-design/human-centered-machine-learning-a770d10562cd>
5. https://s3.us-west-2.amazonaws.com/secure.notion-static.com/8e763bff-5c1c-443e-8e7e-a7a15b3769a2/VERGANTI_AI-HBS.pdf?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAT73L2G45O3KS52Y5%2F20200807%2Fus-west-2%2Fs3%2Faws4_request&X-Amz-Date=20200807T210725Z&X-Amz-Expires=86400&X-Amz-Signature=08addbefe0999d6e284767d211fb4aa2cd8944e317848d908a1991a95ffac035&X-Amz-SignedHeaders=host&response-content-disposition=filename%20%3D%22VERGANTI%2520AI-HBS.pdf%22

Development life cycle

How to develop an AI product? What are the milestones and related deliverables? What are the best management practices and is Agile still working here?

1. https://en.wikipedia.org/wiki/Cross-industry_standard_process_for_data_mining
2. <https://github.com/Azure/Microsoft-TDSP>
3. <https://www.oreilly.com/library/view/agile-data-science/9781491960103/ch01.html>
4. <https://www.coursera.org/specializations/executive-data-science>
5. <https://ccts.osu.edu/content/project-management-research>
6. <https://papers.nips.cc/paper/5656-hidden-technical-debt-in-machine-learning-systems.pdf>

Resource management

What team do you need? How much time and budget? How many cloud resources?

1. https://medium.com/@alexrachnog/fantastic-data-scientists-where-to-find-them-and-how-to-become-one-5b5d5169565b?source=friends_link&sk=0aeebfc628e63a6a6f1ab43dfe0626d1
2. <https://calculator.s3.amazonaws.com/index.html>
3. <https://medium.com/cognifed/the-cost-of-machine-learning-projects-7ca3aea03a5c>

Launching AI solutions

How to test your hypotheses with data without teams of PhDs? No-code solutions, open-source, and managed cloud AI can help here.

No-code solutions

1. <https://teachablemachine.withgoogle.com/>
2. <https://developer.apple.com/machine-learning/create-ml/>

3. <https://www.obviously.ai/>
4. <https://pair-code.github.io/what-if-tool/>

Open-source libraries in Python

1. <https://paperswithcode.com/>
2. <https://www.tensorflow.org/hub>
3. <https://modelzoo.co/>
4. <https://github.com/onnx/models>

Cloud providers managed AI / no-code platforms

1. <https://docs.microsoft.com/en-us/learn/paths/create-no-code-predictive-models-azure-machine-learning/>
2. <https://aws.amazon.com/ru/machine-learning/>
3. <https://cloud.google.com/blog/products/ai-machine-learning/from-raw-data-to-machine-learning-model-no-coding-required> + <https://cloud.google.com/appsheets>

Next steps?

1. Starting to follow major news and innovations related to the AI world. The list of influencers is here:
https://medium.com/@alexrachnog/ultimate-following-list-to-keep-updated-in-artificial-intelligence-32776ffcd079?source=friends_link&sk=a5b98b7642e65d5a67c91ecea0cf15ab
2. Develop your own pilot project! You already have everything you need to start.
3. If you need help, the humble author of this doc is ready to give a hand. Reach himself and his team out at <https://neurons-lab.com/contactus>. **Per assistenza personalizzata, scrivimi a <http://honcharai.com/> :)**