6 steps to start learning artificial intelligence programming (AI)

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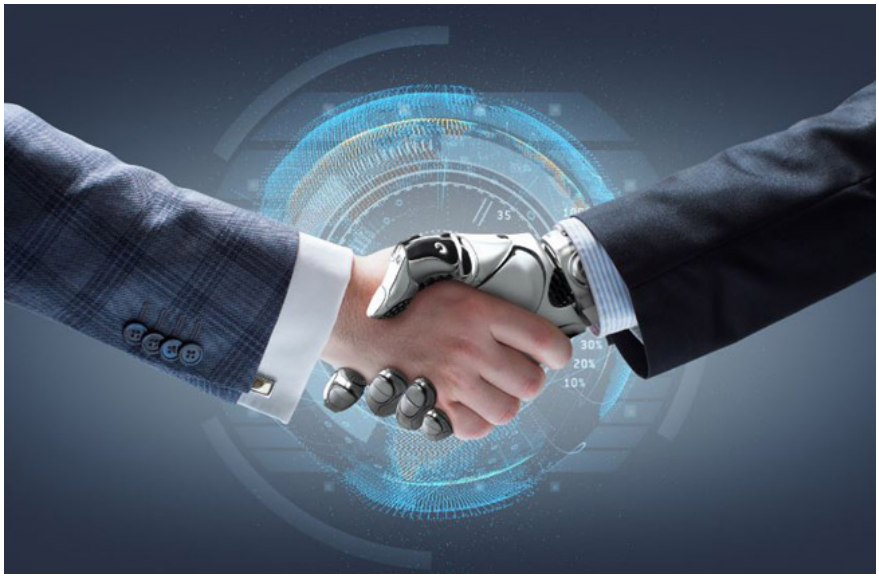
Artificial intelligence or artificial intelligence (Artificial intelligence or Machine intelligence - AI) is an industry in the computer science field. AI is a human-programmed intelligence that aims to help computers automate intelligent behaviors like humans. Let's learn the following 6 steps to start learning about artificial intelligence!

Step 1: Learn about Python and SQL

The key thing you have to do is to learn a programming language. Although there are in fact many languages ?? that you can start with, Python is the best choice because its libraries are more suitable for Machine Learning.

You can refer to the links below:

1. Machine Learning with Text in scikit-learn (PyCon 2016)
2. Machine learning in Python with scikit-learn
3. Machine learning with Python
4. Machine Learning Part 1 | SciPy 2016 Tutorial



Step 2: Learn artificial intelligence from some courses below

Artificial Intelligence: Principles and Techniques from Stanford - An excellent education program for scholars who are inspired by getting more familiar with AI. The course focuses on the basic standards of AI.

CS405: ARTIFICIAL INTELLIGENCE: Introducing the field of artificial intelligence (AI). Documentation of AI programming, logic, search, game play, machine research, natural language understanding and robot introduction to students about AI, tools and techniques, applications for calculation problems and the role of AI.

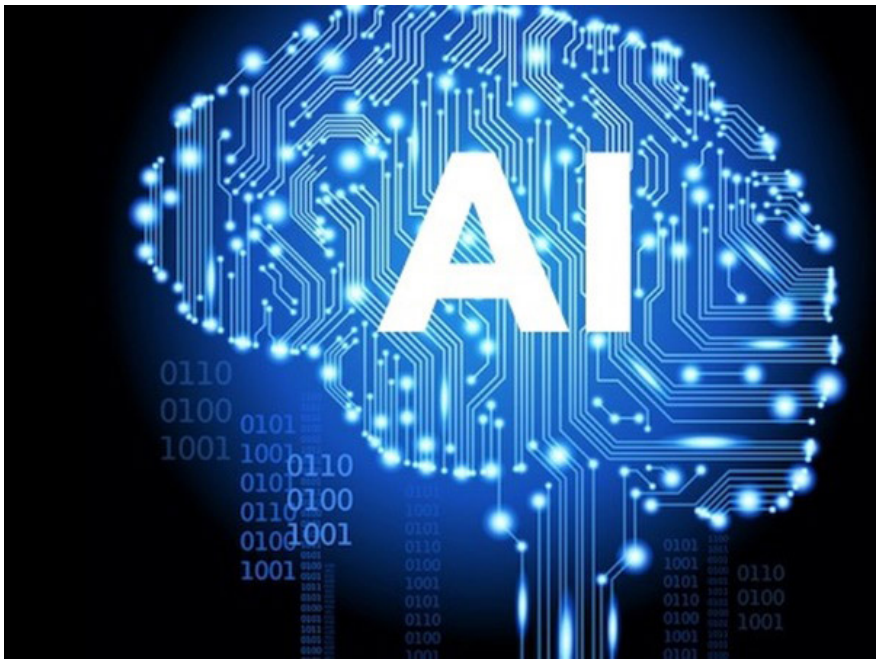
edx.org course on AI: This course provides the basic principles of Artificial Intelligence (AI) and how to apply them. Designing intelligent agents to solve real-world problems includes search, games, machine research, logic and limitations in issues.

MIT's course on AI: This course introduces students to basic knowledge, problem solving and learning methods of artificial intelligence. After completing this course, students will be able to develop intelligent systems by applying solutions to specific computational problems; understand the role of knowledge programming, problem solving and learning in intelligent engineering systems. The course appreciates the role of problem solving, vision and language in understanding human intelligence from a computational perspective.

Learn the Fundamentals of AI - This online course, divided into 10 lessons, helps students better understand the AI ??universe. To understand it, make sure you have some necessary information about math based on direct variables and hypothesis possibilities. You should learn to remember the final goal to prepare in advance.

Berkeley Video Lecturers: The course includes video lectures.

These are the top 6 artificial intelligence courses for beginners and advanced users. Hope they will be useful for you.



Step 3: Learn basic knowledge of probability theory, statistics and Mathematics

You can refer to the links below:

1. Linear algebra - Linear Algebra - MIT 18.06 Gilbert Stranger algebra (Reference link: **https://www.youtube.com/watch?list=PLE7DDD91010BC51F8&v=ZK3O402wf1c**)
2. Probability and Statistics - Probability and Statistics - MIT 6.041 Probability and probability analysis of John Tsitsiklis (Reference link: **https://www.youtube.com/watch?list=PLUl4u3cNGP61MdtwGTqZA0MreSaDybji8&v=j9WZyLZCBzs**)
3. Calculus (Link refer to: **http://kisonecat.com/teaching/2013/calculus-one/**)
4. Multivariate Calculus (Link refer to: **http://kisonecat.com/teaching/2014/m2o2c2/**)
5. Graph theory (Link reference: **https://class.coursera.org/pgm-003**)
6. Optimization methods (Refer to: **https://online.stanford.edu/courses**)

Step 4: Read the book

1. **http://aima.cs.berkeley.edu/**
2. Artificial Intelligence: A Modern Approach, by Stuart J. Russell and Peter Norvig
3. **http://wps.aw.com/wps/media/objects/5771/5909832/PDF/Luger_0136070477_1.pdf**
4. The Quest for Artificial Intelligence by Nils J. Nilsson (Reference link: **http://ai.stanford.edu/~nilsson/QAI/qai.pdf**)
5. Practical Artificial Intelligence: Programming in Java by Mark Watson (Link to reference: **https://www.saylor.org/site/wp-content/uploads/2011/11/CS405-1.1-WATSON.pdf**)
6. **https://grey.colorado.edu/CompCogNeuro/index.php/CCNBook/Main**
7. Simply Logical: Intelligent Reasoning by Example of Peter Flach (Reference link: **https://www.cs.bris.ac.uk/~flach/SL/SL.pdf**)
8. The AI ??Revolution: Road to Superintelligence (Link reference: **https://waitbutwhy.com/2015/01/artificial-intelligence-revolution-1.html**)
9. **http://psych.colorado.edu/~oreilly/comp_ex_cog_neuro.html**

Step 5: Practice

When you have a full understanding of your preferred programming language and practice enough with the essentials, you should start learning more about Machine Learning. In Python, starting learning Scikit-learning libraries, NLTK, SciPy, PyBrain and Numpy will be valuable while compiling Machine Learning algorithms.

Practice some Scikit exercises from the web:

http://scikit-learn.org/ and **https://www.edx.org/course/artificial-intelligence-ai-columbiax-csmm-101x-0** (for practical exercises in Python).

Also here is a summary of materials to learn and cultivate Machine Learning:

1. http://www.r2d3.us/visual-intro-to-machine-learning-part-1/
2. https://www.coursera.org/learn/machine-learning
3. https://www.cs.cmu.edu/~tom/10701_sp11/lectures.shtml
4. https://code.tutsplus.com/tutorials/how-to-build-a-python-bot-that-can-play-web-games–active-11117
5. https://www.udacity.com/course/intro-to-artificial-intelligence–cs271
6. https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-034-artificial-intelligence-fall-2010/

Step 6: Practice - Study - Practice yourself

With this sequence, step by step, you will slowly become an AI programmer.

Once all 6 steps are done, you can be confident to start with AI / ML already. Good luck!

See more:

1. Online courses on artificial intelligence (AI), certification
2. Summary of online AI courses for free
3. Free online learning about AI and Machine learning on Google website