**How to get started with Artificial Intelligence**

Taking the first step is always the hardest but not even knowing the direction makes it worse. This is the case with prospective newcomers in the field. Not everything can be analyzed in one post but I will try to provide you with material and web sources that helped me make my first steps. I’m addressing this post mainly to non-science people, but there will be resources for the bravest out there. That said, knowing mathematics is an (if not *the*) important part of A.I., but fear not for understanding the concepts is more important than solving exercises, and boy do I have a lot of easily digestible resources!

First, you should get hyped. This will be a long journey and it needs dedication and perseverance. Check out [**THIS ARTICLE – REFERENCE BREATHROUGH ARTICLE**] to inspire you and feed your imagination – maybe even watch a few futuristic movies [**ARTICLE ABOUT AI MOVIES???**]. Revisit this step every time you feel overwhelmed. Knowing how to learn is an important skill, so [Dr.Oakley’s and Dr.Sejnowski’s course](https://www.coursera.org/learn/learning-how-to-learn) is a must

Artificial Intelligence is a domain of Computer Science, so you need an introduction to that, and what a better institution to teach you than Harvard (visit [CS50 on edx.org](https://www.edx.org/course/cs50s-introduction-computer-science-harvardx-cs50x)). This will also serve as an introduction to programming, but for learning programming there are better sources. MIT’s [Programming for Everybody](https://www.coursera.org/specializations/python)[[1]](#footnote-1) is a 5-course specialization that will teach you all the basics of Python, the go-to language for A.I., and increasingly top choice for many other fields of Computer Science. Do yourself a favor and pick [anaconda’s distribution of Python 3](https://www.anaconda.com/downloads), it comes with many more packages that you will need and will save you a lot of time troubleshooting later. While taking the course it is advised to also read the accompanying book. After completing this, take a couple days to rest, and dive straight into [Applied Data Science with Python](https://www.coursera.org/specializations/data-science-python) specialization. This is quite harder so take your time. For advancing your programming skills, I strongly suggest taking a look at Sentdex, thenewboston, Siraj Raval, and other sources mentioned in the end.

Now is the time to get a little into math. There are many places to pick up the necessary skills and selecting among them depends on your current level. I advise that you complete all of them. The necessary skills include Linear Algebra, Multivariate Calculus, and Statistics. A good place to start is [Khan Academy](https://www.khanacademy.org/). Going up a level of difficulty, [Data Science Math Skills](https://www.coursera.org/learn/datasciencemathskills) is another good introduction. If these seem too difficult, or you don’t want to dive into this right now, you can just take a look at [3Blue1Brown](https://www.youtube.com/channel/UCYO_jab_esuFRV4b17AJtAw)’s YouTube channel (especially [Essence of Calculus](https://www.youtube.com/playlist?list=PLZHQObOWTQDMsr9K-rj53DwVRMYO3t5Yr) and [Essence of Linear Algebra](https://www.youtube.com/playlist?list=PLZHQObOWTQDPD3MizzM2xVFitgF8hE_ab) playlists). If on the contrary you’re hungry for more, Professor Mine from Duke University offers 5 great courses in [this specialization](https://www.coursera.org/specializations/statistics) (and will also teach you the R programming language). [Mathematics for Machine Learning](https://www.coursera.org/specializations/mathematics-machine-learning) (this will need solid programming skills) is the last in our list of math topics. If you feel overwhelmed, feel free to complete only 1-2 courses, proceed with step 3, and revisit the rest at a later time.

Andrew Ng, among other things, also provides some of the greatest lessons on the field. His course [Machine Learning](https://www.coursera.org/learn/machine-learning) is a must-take. Even though a little old and the programming languages used are not the most common, it will teach you what you need to know in great detail. Now you’re ready to get into [Deep Learning](https://www.coursera.org/specializations/deep-learning), this time a 5-course specialization, again my Professor Ng. If you have made it this far, you no longer need me offering advice.

Before leaving I want to tell you that everybody started out as a newbie, and the only way to move forward is to ask. Not everyone’s teaching style will suit you so you might want to take a look at various different sources. Harrison, aka [Sentdex](https://www.youtube.com/user/sentdex), offers more than 1,000 programming videos on Python, and runs some of the most interesting projects I have seen in tutorials (e.g. Python A.I. in Starcraft II). [Siraj Raval](https://www.youtube.com/channel/UCWN3xxRkmTPmbKwht9FuE5A) is another wizard of the field, or as the fans call him *Bill Nye of Computer Science*, *Kanye of Code*, *Beyonce of Neural Networks*, and more. Although not too high in my list, [thenewboston](https://www.youtube.com/user/thenewboston) is a repository of a great variety of tutorials, teaching you dozens topics in Python and other languages. [Udemy](https://www.udemy.com/) offers paid content, but the quality is lower than (free!) Coursera. I have heard that [Udacity](https://www.udacity.com/) offers great content (again paid), and so does [codecademy](https://www.codecademy.com/), but I haven’t taken any of their courses yet. Finally, put your hopes in [StackOverflow](https://stackoverflow.com) to answer your questions, and so will many Facebook, Discord, Google+, etc, groups and communities so be sure to join as many as you can!

1. The specialization is free, but due to Coursera’s website structure you need to search each individual course and enroll separately, e.g.: <https://www.coursera.org/learn/python> [↑](#footnote-ref-1)