

A Discussion on an AI Degree Program

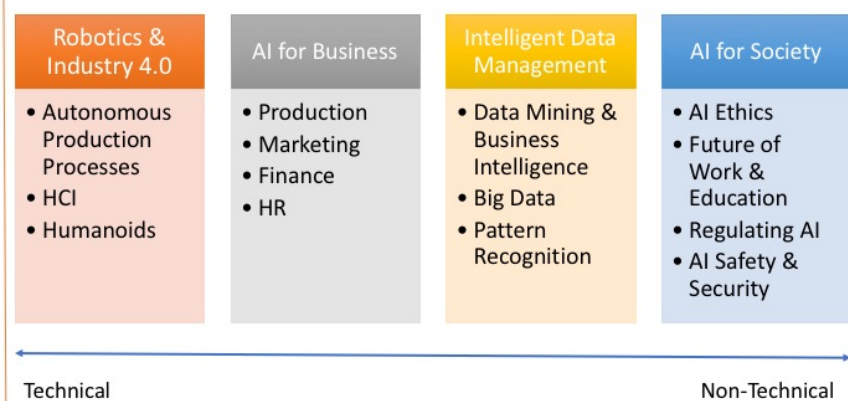
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AI is no longer a technological development. It has connection multi disciplines and a great potential to influence every part of our life. Therefore, the world and its universities has prepare for nurturing graduates with required skills that AI imposes. At theNextMinds we are advising universities to design AI degree programs from very technical to non-technical. Here I am summarising some of the issues to consider that may be helpful:

- AI will be developing fast and influential. This is now a fact. But a very important question to ask is ‘who and what is the AI for?’. The developments in technology in general, and particularly in data science and AI, should aim to support quality of life in our planet and improve lives of underserved communities. Therefore, any work on design of AI degree should seriously consider this essential question, and this in turn signifies the social focus that an AI degree should have.

Artificial Intelligence Degree Curriculum

Areas of Expertise



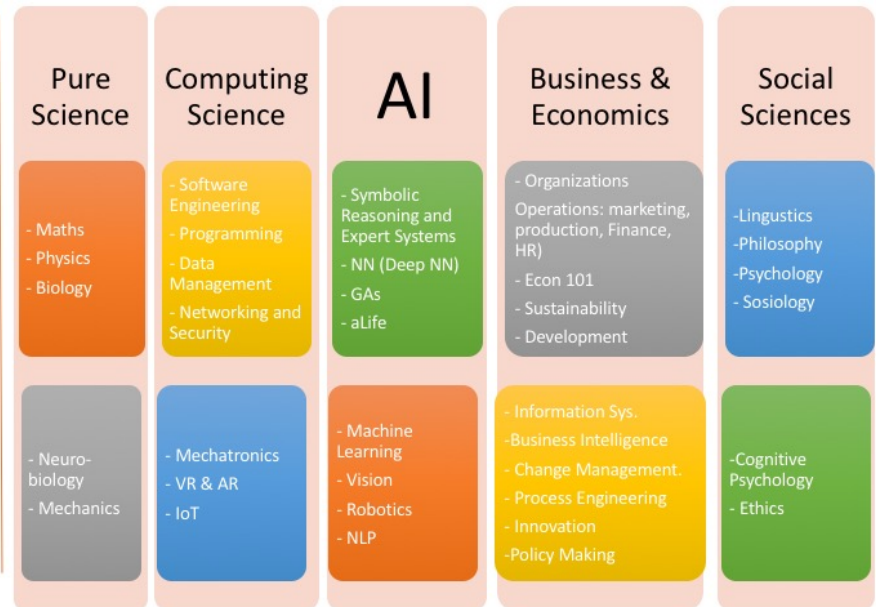
Artificial Intelligence: A Non-Technical Training For Business Professionals

- In the figures provided, I have studied this question: What are the major skills sets we would like a graduate of an AI degree should have? I listed these skills from very technical to less technical ones. And then I worked backwards to find out ‘what are the disciplines that AI is made of’ and that these required skills can be learned from.
- AI is multi-disciplinary and a broader AI degree should support multi-disciplines. These disciplines range from social soft-subjects such as ethics, human-computer sociology to hard engineering, mechatronics and robotics.
- I classified the required skills into four focus areas. On the one hand we have engineering, which extends to data science, and on the other hand we have data science, which extends to business applications. All have implications for the social quality of life, which is shown as the fourth important focus for the total required skills.

- The University may choose to decide which area(s) to focus.
- Once this focus is determined, it is easier to design the required courses from among disciplines that these focus area(s) are affected. I have given an indication on the following figure. This shows just a starting points and requires a further and detailed study.

Artificial Intelligence Degree Curriculum

Relevant Fields



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- As shown in the figures, I tried to be as comprehensive as possible in examining both final skills that a graduate would be gaining and the disciplines that relevant courses to be borrowed from.
- For future, the content and the style of delivery is important. For such a contemporary degree the students will be demanding not only a lecturing but also any time, any where access to course content and delivery of materials!
- I don't know if it is technically possible but a 'virtual AI degree' with a modular structure could be very useful in order to support other degrees at a university.
- In a wide array of disciplines and required skills, a university, in my opinion, should incline towards business and social applications of AI. There several reasons for this:
 - It is a niche area that can drive demand.
 - It supports UN's SDGs
 - It helps raising professionals who are sensitive about the society, planet and future of life.

It is really exciting times to see AI progressing and creating needs in education for innovative degrees. Please get in touch if you are in such a process. At TheNextMinds we would be happy to be part of this equally exciting and rewarding processes in any way we can. We provide bespoke comprehensive AI training to academics and other professional so that they can be equipped to make informed decisions when performing their AI related tasks, of which a curriculum design is one.