1

Title: Machine Learning and Deep Learning: How to get started, job opportunities and future scope

Source: https://www.news.google.com/articles/CBMirAFodHRwczovL3d3dy5pbmRpYXRvZGF5LmluL2VkdWNhdGlvbi10b2RheS9qb2JzLWFuZC1jYXJlZXJzL3N0b3J5L21hY2hpbmUtbGVhcm5pbmctYW5kLWRlZXAtbGVhcm5pbmctaG93LXRvLWdldC1zdGFydGVkLWpvYi1vcHBvcnR1bml0aWVzLWFuZC1mdXR1cmUtc2NvcGUtMTc5MDQ4My0yMDIxLTA0LTEz0gGwAWh0dHBzOi8vd3d3LmluZGlhdG9kYXkuaW4vYW1wL2VkdWNhdGlvbi10b2RheS9qb2JzLWFuZC1jYXJlZXJzL3N0b3J5L21hY2hpbmUtbGVhcm5pbmctYW5kLWRlZXAtbGVhcm5pbmctaG93LXRvLWdldC1zdGFydGVkLWpvYi1vcHBvcnR1bml0aWVzLWFuZC1mdXR1cmUtc2NvcGUtMTc5MDQ4My0yMDIxLTA0LTEz?hl=en-IN&gl=IN&ceid=IN%3Aen

What are Machine Learning and Deep Learning? Fast-forward to 2021 and artificial intelligence and its subfield of machine learning are part of our everyday lives. Machine Learning uses numerical and statistical approaches to encode learning into mathematical models, which are then used to make predictions on new data, situations and scenarios. In deep learning, the first few layers of the network perform feature extraction in a series of stages, just as the brain seems to do. Not only the big tech companies, but also medium and small enterprises are embracing this AI revolution, and are incorporating machine learning in the products and solutions, from the financial sector, to security and defence, to medical and manufacturing. Based on this, the job market has seen a considerable increase in the demand for data scientists and analysts, machine learning experts and developers. Such programmes should focus on the algorithms and state-of-the-art novel engineering and software technologies required for machine learning and deep neural network systems. But to achieve this, a complete understanding of the algorithms and techniques underpinning such complex machine learning and deep learning architectures is paramount. As the demand for AI and machine learning has increased, organisations require professionals with complete knowledge of these growing technologies and experience. For those who acquire skills in machine learning and deep learning, there are a wide range of jobs in multinational corporations across India and the world in various, including as software engineers, electronic engineering systems analysts, data scientist or engineer and data insight analysts.

Number of words in the original article: 825

Number of words in the summarized article: 252

Sentiment (less than 0 for negative, more than 0 for positive): 18

2

Title: 10 Popular Must-Read Free eBooks on Machine Learning

Source: https://www.news.google.com/articles/CBMiVmh0dHBzOi8vd3d3LmFuYWx5dGljc2luc2lnaHQubmV0LzEwLXBvcHVsYXItbXVzdC1yZWFkLWZyZWUtZWJvb2tzLW9uLW1hY2hpbmUtbGVhcm5pbmcv0gFaaHR0cHM6Ly93d3cuYW5hbHl0aWNzaW5zaWdodC5uZXQvMTAtcG9wdWxhci1tdXN0LXJlYWQtZnJlZS1lYm9va3Mtb24tbWFjaGluZS1sZWFybmluZy8_YW1w?hl=en-IN&gl=IN&ceid=IN%3Aen

In the midst of all the excitement around Big Data, we keep hearing the term “Machine Learning”. Today, we will learn about the 10 Popular Must-Read Free Machine Learning eBooks in this article. Python Machine Learning is one of the most popular ML books of the last decade. This book is for those who have a basic understanding of ML and deep learning and want to learn how to apply it. It describes how to implement machine learning algorithms. Advanced Python Machine Learning will take you through some of the most groundbreaking techniques in the field if you’re looking for another book to challenge and drive you. Two of the most common Python libraries for machine and deep learning are Scikit-learn and Tensorflow. In simple way, it’s Machine Learning with more complexity and experience, which can then be used to power various types of AI. Python Deep Learning can draw on existing Python and Machine Learning skills to create more comprehensive Deep Learning models that can be used in a variety of applications, such as image recognition and gaming. Anodot points out at a serious issue of data abundance.

Number of words in the original article: 705

Number of words in the summarized article: 190

Sentiment (less than 0 for negative, more than 0 for positive): 41

3

Title: Twitter analysing harmful impacts of its AI, machine learning algorithms

Source: https://www.news.google.com/articles/CBMikAFodHRwczovL3d3dy5idXNpbmVzcy1zdGFuZGFyZC5jb20vYXJ0aWNsZS90ZWNobm9sb2d5L3R3aXR0ZXItYW5hbHlzaW5nLWhhcm1mdWwtaW1wYWN0cy1vZi1pdHMtYWktbWFjaGluZS1sZWFybmluZy1hbGdvcml0aG1zLTEyMTA0MTYwMDIxOV8xLmh0bWzSAZQBaHR0cHM6Ly93YXAuYnVzaW5lc3Mtc3RhbmRhcmQuY29tL2FydGljbGUtYW1wL3RlY2hub2xvZ3kvdHdpdHRlci1hbmFseXNpbmctaGFybWZ1bC1pbXBhY3RzLW9mLWl0cy1haS1tYWNoaW5lLWxlYXJuaW5nLWFsZ29yaXRobXMtMTIxMDQxNjAwMjE5XzEuaHRtbA?hl=en-IN&gl=IN&ceid=IN%3Aen

In a bid to assess racial and gender bias in its artificial intelligence/machine learning

systems, Twitter is starting a new initiative called Responsible Machine Learning. Terming it a long journey in its early days, Twitter said the initiative will assess any "unintentional harms" caused by its algorithms. "When Twitter uses ML, it can impact hundreds of millions of Tweets per day and sometimes, the way a system was designed to help could start to behave differently than was intended," said Jutta Williams and Rumman Chowdhury from Twitter. "These subtle shifts can then start to impact the people using Twitter and we want to make sure we're studying those changes and using them to build a better product," they said in a statement late on Thursday. Twitter's 'Responsible ML' working group is interdisciplinary and is made up of people from across the company, including technical, research, trust and safety, and product teams. "Leading this work is our ML Ethics, Transparency and Accountability (META) team: a dedicated group of engineers, researchers, and data scientists collaborating across the company to assess downstream or current unintentional harms in the algorithms we use and to help Twitter prioritise which issues to tackle first," the company elaborated. Twitter said it will research and understand the impact of ML decisions, conduct in-depth analysis and studies to assess the existence of potential harms in the algorithms it uses. Some of the tasks will be a gender and racial bias analysis of its image cropping (saliency) algorithm, a fairness assessment of our Home timeline recommendations across racial subgroups and an analysis of content recommendations for different political ideologies across seven countries. "The most impactful applications of responsible ML will come from how we apply our learnings to build a better Twitter," the company said. Twitter said it is also building explainable ML solutions so people can better understand its algorithms, what informs them, and how they impact what they see on the platform.

Number of words in the original article: 566

Number of words in the summarized article: 325

Sentiment (less than 0 for negative, more than 0 for positive): 43

4

Title: Data Science Why Machine Learning Over Artificial Intelligence?

Source: https://www.news.google.com/articles/CBMiU2h0dHBzOi8vd3d3LmFuYWx5dGljc2luc2lnaHQubmV0L3doeS1tYWNoaW5lLWxlYXJuaW5nLW92ZXItYXJ0aWZpY2lhbC1pbnRlbGxpZ2VuY2Uv0gEA?hl=en-IN&gl=IN&ceid=IN%3Aen

Artificial Intelligence, data science, and machine learning – all fall in the same domain. Over the years, we have seen the immense applications of data science, AI and ML in varied fields. AI, being a replica of human intelligence aids in making better decisions by understanding data in-depth, identifying the patterns and trends which otherwise would have been difficult for humans to do the same manually. Will the model be

successful in applying the knowledge gained to deal with new data sets? This is exactly where machine learning comes into play. With machine learning, it is possible for the machine to learn from the huge amounts of data we give as inputs. The machine is in a position to apply the knowledge it has gained to new pieces of data that streams into the system. The day we get to see computers and machines in a state of handling almost all the real-world situations is not too far. People tend to get confused between data science, AI and ML. In a nutshell, the road to success is a lot easier when technology is not limited to data science and AI.

Number of words in the original article: 630

Number of words in the summarized article: 191

Sentiment (less than 0 for negative, more than 0 for positive): 33

5

Title: Machine learning can be your best bet to transform your career

Source: https://www.news.google.com/articles/CBMiYGh0dHBzOi8vd3d3LmFuYWx5dGljc2luc2lnaHQubmV0L21hY2hpbmUtbGVhcm5pbmctY2FuLWJlLXlvdXItYmVzdC1iZXQtdG8tdHJhbnNmb3JtLXlvdXItY2FyZWVyL9IBZGh0dHBzOi8vd3d3LmFuYWx5dGljc2lucaHQubmV0L21hY2hpbmUtbGVhcm5pbmctY2FuLWJlLXlvdXItYmVzdC1iZXQtdG8tdHJhbnNmb3JtLXlvdXItY2FyZWVyLz9hbXA?hl=en-IN&gl=IN&ceid=IN%3Aen

Meta- Machine learning is also booming as a field of study. While virtual courses on AI and machine learning can be a pricy affair, the very attempt in learning machine learning can be done otherwise as well. This is the best time to learn machine learning as the trends in the market suggest. The global machine learning market is estimated at US dollar 8.43 billion in 2019, and is expected to reach 117 billion by 2027, at a CAGR of 39.2%. AI and machine learning are not only used in machine learning applications but also in Internet of things, like self-driving cars, smart homes, digital assistants, etc. In fact during COVID-19, statistical machine learning had played a significant role in generating advanced models for predicting virus spread, and aided in the management of the pandemic across the world. Machine learning in finance has also secured a respectable place among the business leaders using the technology for generating automatic models for stock management. While this article will guide you through some of the best ways of finding machine learning courses online, we will also give you some tips for learning machine learning at your own pace through books and other resources. Along with the courses, Erich Jang, a research engineer at Google Brain, suggests, one of the best ways to learn machine learning is to implement some of the papers on your own on a specific sub-field of machine learning like Bayesian deep learning, computer vision, natural language processing etc. Finally, given it is a complicated field, patience is key!

Number of words in the original article: 698

Number of words in the summarized article: 260

Sentiment (less than 0 for negative, more than 0 for positive): 70
