

## MACHINE LEARNING CAREER GUIDE

A Comprehensive Playbook
To Becoming A Machine Learning
Engineer



## BECOME A PART OF THE MACHINE LEARNING REVOLUTION

Over the last few years, technology has evolved at a rapid pace, enabling faster changes and processes. From virtual personal assistants to traffic prediction, face recognition and product recommendations, machine learning (ML) is increasingly finding applications even in our day-to-day lives. This has opened up numerous job opportunities and led to a rising demand for skilled machine learning professionals.

Machine learning and similar new-age technologies aren't just bringing in new jobs, but changing the very nature of the job market itself. Professionals ahead of the curve will find it easy to keep pace with emerging jobs. 2020 is an exciting time for professionals to stay current with tech trends and acquire new-age tech skills.

Simplilearn's 2020 Machine Learning Playbook is your complete guide to the skills required, career opportunities available and the ideal learning path needed to propel a career in the thriving and lucrative field of machine learning. Our Playbook also provides the most trending technologies, the top companies that are hiring, and ways to jumpstart your career.

Read this Machine Learning Playbook for a personalized roadmap to a successful career, and take a sneak peek into the world that awaits you.



# SIGNS ARE THERE. ARE YOU WATCHING?



## **Future of Machine Learning**

A career as a Machine Learning engineer offers endless opportunities. The role of a Machine Learning engineer was cited as the third most indemand job in the realm of Artificial Intelligence, with Machine Learning expertise ranked as the most in-demand technical skill set today.

## Al in Core Industry Sector

The field of Machine Learning and related technologies is drastically changing the way business is done across all industry sectors. These edge technologies are gradually bringing about transformational changes, and faster processes across sectors.

## **Rise of Machine Learning Jobs**

Data Scientist roles have increased by 650% since 2012, and there will be 11.5 million Machine learning engineering positions by 2026. Pursuing a Machine Learning job is a good bet for consistent, well-paying employment and skill set that will be in demand for decades to come.



Healthcare



Retail



**Digital Marketing** 



**Transport** 



Education



**Finance** 



## MACHINE LEARNING: HOTTEST OPPORTUNITIES

## Machine Learning Engineer

As a Machine Learning Engineer, you will develop, manage, and own automation initiatives within an organization. You'll also:

- → Produce project outcomes, with the goal of making the programs more effective, and collaborating with data engineers in order to build data and model pipelines
- Demonstrate end-to-end understanding of applications that are being created and take a lead on software engineering and software design projects
- Analyze complex datasets for the purpose of extracting insights
- → Research and implement best practices to improve the existing machine learning infrastructure, and provide support to engineers and product managers in implementing machine learning in the company's products



The average machine learning engineer salary is \$111,312

## **Top Job Roles for Machine Learning Professionals**

- Data Scientist
- Data Analyst
- Business Intelligence Developer
- Data Architect
- Al Engineer

## **Top Companies Hiring Machine Learning Professionals**



















Career opportunities for Machine Learning engineers have grown exponentially to meet the demands of digitally transformed industries, and newer job roles keep emerging in the field.

### Top 10 Skills Needed For Machine Learning Jobs:

- Programming Languages
- Probability and Statistics
- Machine Learning Algorithms
- Data Modeling and Evaluation
- Computer Science Fundamental
- Data Visualization

- System Design
- Data Wrangling
- Business Intelligence

## MAP TO YOUR FUTURE

Hands-on experience with programming languages is essential for coding and analyzing the data to build a model



**Programming Skills** 

Python | R | Java

Master mathematical concepts to grasp and implement Machine learning algorithms quickly and more efficiently

10 01

### Mathematics

Statistics | Probability | Calculus

Master machine learning algorithms to build predictive models and predict future trends and derive business insights.



## Machine Learning algorithms

Supervised algorithm | Unsupervised algorithm | Reinforcement algorithm



of data

### **Data Engineering**

Learn engineering skills

visualize the huge chunk

to clean, process,

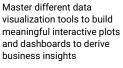
manipulate and

Data preprocessing | Data manipulation | Data visualization Know Hadoop and its ecosystem and Spark to understand and analyze data that is stored, processed and manipulated using Hadoop.



### **Big Data**

Hadoop | Spark | Mahout | Spark MLlib





## **Business Intelligence**

Tableau | QlikView

Machine Learning Engineer

## LET THE LEARNING BEGIN

The growth of fields like Machine Learning and Al has increased the demand for talented minds to help solve pressing business challenges faster and better. However, quitting a full-time job to go back to school isn't realistic for most people, and this is where Simplilearn comes into play. We're an online learning platform offering excellent courses with self-paced learning and live virtual classroom options available. With our highly-detailed course of study, you'll master everything you need to know to make a splash in these thriving fields.

At Simplilearn, our industry experts deliver course content through a format that fits into your pace. Start one of our courses in Artificial Intelligence today and kickstart your career in the lucrative field of Machine Learning.

## The courses we offer:

- Machine Learning Certification Course
- Integrated program in Big Data and Data Science
- Artificial Intelligence Engineer Master's Program
- Deep Learning Course with TensorFlow
- Data Science with Python Training Course





## GET CERTIFIED. GET AHEAD.

Digital economy training | Driving innovation and accelerating careers

## Our Latest and Significant Awards:

2019	Stevie® Award for Innovation in Customer Service Management, Planning & Practice
2019	Stevie® Award for Customer Service Success
2018	EC-Council ATC Circle of Excellence Award
2017-19	Top 20 Online Learning Library Companies (by Training Industry Magazine)



Founded in 2009, Simplilearn is one of the world's leading providers of online training for Digital Marketing, Cloud Computing, Project Management, Data Science, IT Service Management, Software Development and many other emerging technologies. Based in Bangalore, India, San Francisco, California, and Raleigh, North Carolina, Simplilearn partners with companies and individuals to address their unique needs, providing training and coaching to help working professionals meet their career goals. Simplilearn has enabled over 1 million professionals and companies across 150+ countries train, certify and upskill their employees.

Simplilearn's 400+ training courses are designed and updated by world-class industry experts. Their blended learning approach combines e-learning classes, instructor-led live virtual classrooms, applied learning projects, and 24/7 teaching assistance. More than 40 global training organizations have recognized Simplilearn as an official provider of certification training. The company has been named the 8th most influential education brand in the world by LinkedIn.

For more information, visit www.simplilearn.com.

© 2009-2019 - Simplilearn Solutions. All Rights Reserved. | The certification names are the trademarks of their respective owners.