Available Training for Open Source Technology

R			
Course	**Description**	**Venue**	**Cost**
RStudio Primers	Interactive Tutorials covering the basics of data science	RStudio	Free
R for Data Science	This is the website for “R for Data Science”. This book will teach you how to do data science with R: You’ll learn how to get your data into R, get it into the most useful structure, transform it, visualise it and model it. In this book, you will find a practicum of skills for data science. Just as a chemist learns how to clean test tubes and stock a lab, you’ll learn how to clean data and draw plots—and many other things besides. These are the skills that allow data science to happen, and here you will find the best practices for doing each of these things with R. You’ll learn how to use the grammar of graphics, literate programming, and reproducible research to save time. You’ll also learn how to manage cognitive resources to facilitate discoveries when wrangling, visualising, and exploring data.	Self Contained	Free
RStudio Portfolio Training Exercises	Welcome! This document will guide you through a series of exercises that will introduce Shiny, Flexdashboards, R Markdown, parameterized reports, and Plumber APIs. These artifacts will be explored in the context of RStudio Connect.	RStudio	Free
Learn R	R is a popular language used by data scientists and researchers. If you are working with data, R is a fantastic language to learn.	Codeacademy	Free
Statistics and R	An introduction to basic statistical concepts and R programming skills necessary for analyzing data in the life sciences	Harvard University via edX	Free Audit, Paid Certificate
Data Science Capstone	To become an expert data scientist you need practice and experience. By completing this capstone project you will get an opportunity to apply the knowledge and skills in R data analysis that you have gained throughout the series. This final project will test your skills in data visualization, probability, inference and modeling, data wrangling, data organization, regression, and machine learning.	Harvard University via edX	Free Audit, Paid Certificate

Introduction to R for Data Science	Learn the R statistical programming language, the lingua franca of data science in this hands-on course.	Microsoft via edX	Free Audit, Paid Certificate
Principles of Machine Learning: R edition	Get hands-on experience building and deriving insights from machine learning models using R and Azure Notebooks.	Microsoft via edX	Free Audit, Paid Certificate
Data Science Research Methods: R Edition	Get hands-on experience with the science and research aspects of data science work, from setting up a proper data study to making valid claims and inferences from data experiments.	Microsoft via edX	Free Audit, Paid Certificate
Data Science: R Basics	Build a foundation in R and learn how to wrangle, analyze, and visualize data.	Harvard University via edX	Free Audit, Paid Certificate

Essential Math for Machine Learning: R Edition	Learn the essential mathematical foundations for machine learning and artificial intelligence.	Microsoft via edX	Free Audit, Paid Certificate
Data Science: Foundations using R Specialization	This Specialization covers foundational data science tools and techniques, including getting, cleaning, and exploring data, programming in R, and conducting reproducible research. Learners who complete this specialization will be prepared to take the Data Science: Statistics and Machine Learning specialization, in which they build a data product using real-world data. The five courses in this specialization are the very same courses that make up the first half of the Data Science Specialization. This specialization is presented for learners who want to start and complete the foundational part of the curriculum first, before moving onto the more advanced topics in Data Science: Statistics and Machine Learning.	Johns Hopkins University via Coursera	Free Audit, Paid Certificate
R Programming	In this course you will learn how to program in R and how to use R for effective data analysis. You will learn how to install and configure software necessary for a statistical programming environment and describe generic programming language concepts as they are implemented in a high-level statistical language. The course covers practical issues in statistical computing which includes programming in R, reading data into R, accessing R packages, writing R functions, debugging, profiling R code, and organizing and commenting R code. Topics in statistical data analysis will provide working examples.	Johns Hopkins University via Coursera	Free Audit, Paid Certificate
Statistics with R Specialization	In this Specialization, you will learn to analyze and visualize data in R and create reproducible data analysis reports, demonstrate a conceptual understanding of the unified nature of statistical inference, perform frequentist and Bayesian statistical inference and modeling to understand natural phenomena and make data-based decisions, communicate statistical results correctly, effectively, and in context without relying on statistical jargon, critique data-based claims and evaluated data-based decisions, and wrangle and visualize data with R packages for data analysis. You will produce a portfolio of data analysis projects from the Specialization that demonstrates mastery of statistical data analysis from exploratory analysis to inference to modeling, suitable for applying for statistical analysis or data scientist positions.	Duke University via Coursera	Free Audit, Paid Certificate

Statistical Analysis with R for Public Health Specialization	Master Statistics for Public Health and Learn R. Develop your statistical thinking skills and learn key data analysis methods through R	Imperial College London via Coursera	Free Audit, Paid Certificate
The R Programming Environment	This course provides a rigorous introduction to the R programming language, with a particular focus on using R for software development in a data science setting. Whether you are part of a data science team or working individually within a community of developers, this course will give you the knowledge of R needed to make useful contributions in those settings. As the first course in the Specialization, the course provides the essential foundation of R needed for the following courses. We cover basic R concepts and language fundamentals, key concepts like tidy data and related "tidyverse" tools, processing and manipulation of complex and large datasets, handling textual data, and basic data science tasks. Upon completing this course, learners will have fluency at the R console and will be able to create tidy datasets from a wide range of possible data sources.	Johns Hopkins University via Coursera	Free Audit, Paid Certificate
Mastering Software Development in R Specialization	R is a programming language and a free software environment for statistical computing and graphics, widely used by data analysts, data scientists and statisticians. This Specialization covers R software development for building data science tools. As the field of data science evolves, it has become clear that software development skills are essential for producing and scaling useful data science results and products. This Specialization will give you rigorous training in the R language, including the skills for handling complex data, building R packages, and developing custom data visualizations. You'll be introduced to indispensable R libraries for data manipulation, like tidyverse, and data visualization and graphics, like ggplot2. You'll learn modern software development practices to build tools that are highly reusable, modular, and suitable for use in a team-based environment or a community of developers. This Specialization is designed to serve both data analysts, who may want to gain more familiarity with hands-on, fundamental software skills for their everyday work, as well as data mining experts and data scientists, who may want to use R to scale their developing and programming skills, and further their careers as data science experts.	Johns Hopkins University via Coursera	Free Audit, Paid Certificate
Advanced R Programming	This course covers advanced topics in R programming that are necessary for developing powerful, robust, and reusable data science tools. Topics covered include functional programming in R, robust error handling, object oriented programming, profiling and benchmarking, debugging, and proper design of functions. Upon completing this course you will be able to identify and abstract common data analysis tasks and to encapsulate them in user-facing functions. Because every data science environment encounters unique data challenges, there is always a need to develop custom software specific to your organization's mission. You will also be able to define new data types in R and to develop a universe of functionality specific to those data types to enable cleaner execution of data science tasks and stronger reusability within a team.	Johns Hopkins University via Coursera	Free Audit, Paid Certificate
Introduction to R	In Introduction to R, you will master the basics of this widely used open source language, including factors, lists, and data frames. With the knowledge gained in this course, you will be ready to undertake your first very own data analysis. Oracle estimated over 2 million R users worldwide in 2012, cementing R as a leading programming language in statistics and data science. Every year, the number of R users grows by about 40%, and an increasing number of organizations are using it in their day-to-day activities. Begin your journey to learn R with us today!	Datacamp	Paid
Intermediate R	Intermediate R is the next stop on your journey in mastering the R programming language. In this R training, you will learn about conditional statements, loops, and functions to power your own R scripts. Next, make your R code more efficient and readable using the apply functions. Finally, the utilities chapter gets you up to speed with regular expressions in R, data structure manipulations, and times and dates. This course will allow you to take the next step in advancing your overall knowledge and capabilities while programming in R.	Datacamp	Paid

Introduction to the Tidyverse	This is an introduction to the programming language R, focused on a powerful set of tools known as the Tidyverse. You'll learn the intertwined processes of data manipulation and visualization using the tools dplyr and ggplot2. You'll learn to manipulate data by filtering, sorting, and summarizing a real dataset of historical country data in order to answer exploratory questions. You'll then learn to turn this processed data into informative line plots, bar plots, histograms, and more with the ggplot2 package. You'll get a taste of the value of exploratory data analysis and the power of Tidyverse tools. This is a suitable introduction for those who have no previous experience in R and are interested in performing data analysis.	Datacamp	Paid
Importing Data in R (Part 1)	Importing data into R should be the easiest step in your analysis. Unfortunately, that is almost never the case. Data can come in many formats, ranging from .csv and text files, to statistical software files, to databases and HTML data. Knowing which approach to use is key to getting started with the actual analysis. In this course, you'll start by learning how to read .csv and text files in R. You will then cover the readr and data.table packages to easily and efficiently import flat file data. After that, you will learn how to read .xls files in R using readxl and gdata.	Datacamp	Paid
Data Visualization with ggplot2 (Part 1)	The ability to produce meaningful and beautiful data visualizations is an essential part of a data scientist skill set. This course, the first R data visualization course in the series, introduces you to the principles of good visualizations and the grammar of graphics plotting concepts implemented in the ggplot2 package. ggplot2 has become the go-to tool for flexible and professional plots in R. We'll examine the first three essential layers for making a plot: data, aesthetics, and geometries. By the end of the course you will be able to make complex exploratory plots.	Datacamp	Paid
Cleaning Data in R	It's commonly said that data scientists spend 80% of their time cleaning and manipulating data and only 20% of their time actually analyzing it. For this reason, it is critical to become familiar with the data cleaning process and all of the tools available to you along the way. This course provides a very basic introduction to cleaning data in R using the tidyr, dplyr, and stringr packages. After taking the course you'll be able to go from raw data to awesome insights as quickly and painlessly as possible!	Datacamp	Paid
Introduction to Data in R	Scientists seek to answer questions using rigorous methods and careful observations. These observations—collected from the likes of field notes, surveys, and experiments—form the backbone of a statistical investigation and are called data. Statistics is the study of how best to collect, analyze, and draw conclusions from data. It is helpful to put statistics in the context of a general process of investigation: 1) identify a question or problem; 2) collect relevant data on the topic; 3) analyze the data; and 4) form a conclusion. In this course, you'll focus on the first two steps of the process.	Datacamp	Paid
Introduction to Writing Functions in R	Being able to write your own functions makes your analyses more readable, with fewer errors, and more reusable from project to project. Function writing will increase your productivity more than any other skill! In this course you'll learn the basics of function writing, focusing on the arguments going into the function and the return values. You'll be writing useful data science functions, and using real-world data on Wyoming tourism, stock price/earnings ratios, and grain yields.	Datacamp	Paid
Introduction to Machine Learning	This online machine learning course is perfect for those who have a solid basis in R and statistics, but are complete beginners with machine learning. After a broad overview of the discipline's most common techniques and applications, you'll gain more insight into the assessment and training of different machine learning models. The rest of the course is dedicated to a first reconnaissance with three of the most basic machine learning tasks: classification, regression and clustering.	Datacamp	Paid
Writing Efficient R Code	The beauty of R is that it is built for performing data analysis. The downside is that sometimes R can be slow, thereby obstructing our analysis. For this reason, it is essential to become familiar with the main techniques for speeding up your analysis, so you can reduce computational time and get insights as quickly as possible.	Datacamp	Paid
Introduction to Text Analysis in R	From social media to product reviews, text is an increasingly important type of data across applications, including marketing analytics. In many instances, text is replacing other forms of unstructured data due to how inexpensive and current it is. However, to take advantage of everything that text has to offer, you need to know how to think about, clean, summarize, and model text. In this course, you will use the latest tidy tools to quickly and easily get started with text. You will learn how to wrangle and visualize text, perform sentiment analysis, and run and interpret topic models.	Datacamp	Paid
Building Dashboards with shinydashboard	Once you've started learning tools for building interactive web applications with shiny, this course will translate this knowledge into building dashboards. Dashboards, a common data science deliverable, are pages that collate information, often tracking metrics from a live-updating data source. You'll gain more expertise using shiny while learning to build and design these dynamic dashboards. In the process, you'll pick up tips to optimize performance as well as best practices to create a visually appealing product.	Datacamp	Paid

Python

Course	Description	Venue	Cost
Introduction to Python 3 (basics) - Learning to Program with Python 3	Welcome to an introduction to Python and Programming. My goal with this series is to do things a bit different than you usually see with programming tutorials. The problem with most basics tutorials is they just cover the syntax of a language and use a toy example per new concept, repeating this through up to 100s of things like statements, methods and other paradigms of programming.	Pythonprogramming.net	Free
Intermediate Python Programming introduction	Welcome to the intermediate Python programming tutorial series. In this series, we're going to be taking the "next steps" after one has become comfortable with the basics of Python, and has been working with it for a bit.	Pythonprogramming.net	Free
Sockets Tutorial with Python 3 part 1 - sending and receiving data	Welcome to a tutorial on sockets with Python 3. We have a lot to cover, so let's just jump right in. The socket library is a part of the standard library, so you already have it.	Pythonprogramming.net	Free
Web scraping and parsing with Beautiful Soup 4 Introduction	elcome to a tutorial on web scraping with Beautiful Soup 4. Beautiful Soup is a Python library aimed at helping programmers who are trying to scrape data from websites.	Pythonprogramming.net	Free
Learn Python 2	Learn the basics of the world's fastest growing and most popular programming language used by software engineers, analysts, data scientists, and machine learning engineers alike.	Codeacademy	Free
Programming for Everybody (Getting Started with Python)	This course is a "no prerequisite" introduction to Python Programming. You will learn about variables, conditional execution, repeated execution and how we use functions. The homework is done in a web browser so you can do all of the programming assignments on a phone or public computer.	University of Michigan via edX	Free Audit, Paid Certificate
Data Science Research Methods: Python Edition	Get hands-on experience with the science and research aspects of data science work, from setting up a proper data study to making valid claims and inferences from data experiments.	Microsoft via edX	Free Audit, Paid Certificate

Python Data Structures	The second course in Python for Everybody explores variables that contain collections of data like string, lists, dictionaries, and tuples. Learning how to store and represent and manipulate data collections while a program is running is an important part of learning how to program.	University of Michigan via edX	Free Audit, Paid Certificate
Introduction to Python: Absolute Beginner	In this course that's perfect for true beginners, learn Python basics and start coding right away.	Microsoft via edX	Free Audit, Paid Certificate
Introduction to Python: Fundamentals	Build on what you learned in the "Introduction to Python: Absolute Beginner" course, and dig into data structure basics.	Microsoft via edX	Free Audit, Paid Certificate
Python for Data Science	Learn to use powerful, open-source, Python tools, including Pandas, Git and Matplotlib, to manipulate, analyze, and visualize complex datasets.	UC San Diego via edX	Free Audit, Paid Certificate
Analyzing Data with Python	In this course, you will learn how to analyze data in Python using multi-dimensional arrays in numpy, manipulate DataFrames in pandas, use SciPy library of mathematical routines, and perform machine learning using scikit-learn!	IBM via edX	Free Audit, Paid Certificate

Visualizing Data with Python	Data visualization is the graphical representation of data in order to interactively and efficiently convey insights to clients, customers, and stakeholders in general.	IBM via edX	Free Audit, Paid Certificate
Using Python for Research	Take your introductory knowledge of Python programming to the next level and learn how to use Python 3 for your research.	Harvard University via edX	Free Audit, Paid Certificate
Analytics in Python	Data is the lifeblood of an organization. Competency in programming is an essential skill for successfully extracting information and knowledge from data. The goal of this course is to introduce learners to the basics of programming in Python and to give a working knowledge of how to use programs to deal with data.	Columbia University via edX	Free Audit, Paid Certificate
Introduction to Python for Data Science	The ability to analyze data with Python is critical in data science. Learn the basics, and move on to create stunning visualizations.	Microsoft via edX	Free Audit, Paid Certificate
Principles of Machine Learning: Python Edition	Get hands-on experience building and deriving insights from machine learning models using Python and Azure Notebooks.	Microsoft via edX	Free Audit, Paid Certificate

Python Basics for Data Science	This Python course provides a beginner-friendly introduction to Python for Data Science. Practice through lab exercises, and you'll be ready to create your first Python scripts on your own!	IBM via edX	Free Audit, Paid Certificate
Machine Learning with Python: A Practical Introduction	Machine Learning can be an incredibly beneficial tool to uncover hidden insights and predict future trends. This Machine Learning with Python course will give you all the tools you need to get started with supervised and unsupervised learning.	IBM via edX	Free Audit, Paid Certificate
Python for Everybody Specialization	This Specialization builds on the success of the Python for Everybody course and will introduce fundamental programming concepts including data structures, networked application program interfaces, and databases, using the Python programming language. In the Capstone Project, you'll use the technologies learned throughout the Specialization to design and create your own applications for data retrieval, processing, and visualization.	University of Michigan via Coursera	Free Audit, Paid Certificate
Python for Data Science and AI	This introduction to Python will kickstart your learning of Python for data science, as well as programming in general. This beginner-friendly Python course will take you from zero to programming in Python in a matter of hours.	IBM via Coursera	Free Audit, Paid Certificate
Applied Data Science with Python Specialization	The 5 courses in this University of Michigan specialization introduce learners to data science through the python programming language. This skills-based specialization is intended for learners who have a basic python or programming background, and want to apply statistical, machine learning, information visualization, text analysis, and social network analysis techniques through popular python toolkits such as pandas, matplotlib, scikit-learn, nltk, and networkx to gain insight into their data. Introduction to Data Science in Python (course 1), Applied Plotting, Charting & Data Representation in Python (course 2), and Applied Machine Learning in Python (course 3) should be taken in order and prior to any other course in the specialization. After completing those, courses 4 and 5 can be taken in any order. All 5 are required to earn a certificate.	University of Michigan via Coursera	Free Audit, Paid Certificate

Python Basics	This course introduces the basics of Python 3, including conditional execution and iteration as control structures, and strings and lists as data structures. You'll program an on-screen Turtle to draw pretty pictures. You'll also learn to draw reference diagrams as a way to reason about program executions, which will help to build up your debugging skills. The course has no prerequisites. It will cover Chapters 1-9 of the textbook "Fundamentals of Python Programming," which is the accompanying text (optional and free) for this course. The course is for you if you're a newcomer to Python programming, if you need a refresher on Python basics, or if you may have had some exposure to Python programming but want a more in-depth exposition and vocabulary for describing and reasoning about programs. This is the first of five courses in the Python 3 Programming Specialization.	University of Michigan via Coursera	Free Audit, Paid Certificate
Introduction to Python	Python is a general-purpose programming language that is becoming ever more popular for data science. Companies worldwide are using Python to harvest insights from their data and gain a competitive edge. Unlike other Python tutorials, this course focuses on Python specifically for data science. In our Introduction to Python course, you'll learn about powerful ways to store and manipulate data, and helpful data science tools to begin conducting your own analyses. Start DataCamp's online Python curriculum now.	Datacamp	Paid
Intermediate Python	Learning Python is crucial for any aspiring data science practitioner. Learn to visualize real data with Matplotlib's functions and get acquainted with data structures such as the dictionary and the pandas DataFrame. After covering key concepts such as boolean logic, control flow, and loops in Python, you'll be ready to blend together everything you've learned to solve a case study using hacker statistics.	Datacamp	Paid
Introduction to Data Science in Python	Begin your journey into Data Science! Even if you've never written a line of code in your life, you'll be able to follow this course and witness the power of Python to perform Data Science. You'll use data to solve the mystery of Bayes, the kidnapped Golden Retriever, and along the way you'll become familiar with basic Python syntax and popular Data Science modules like Matplotlib (for charts and graphs) and Pandas (for tabular data).	Datacamp	Paid
pandas Foundations	pandas DataFrames are the most widely used in-memory representation of complex data collections within Python. Whether in finance, a scientific field, or data science, familiarity with pandas is essential. This course teaches you to work with real-world datasets containing both string and numeric data, often structured around time series. You will learn powerful analysis, selection, and visualization techniques in this course.	Datacamp	Paid
Cleaning Data in Python	A vital component of data science involves acquiring raw data and getting it into a form ready for analysis. It is commonly said that data scientists spend 80% of their time cleaning and manipulating data, and only 20% of their time actually analyzing it. This course will equip you with all the skills you need to clean your data in Python, from learning how to diagnose problems in your data, to dealing with missing values and outliers. At the end of the course, you'll apply all of the techniques you've learned to a case study to clean a real-world Gapminder dataset.	Datacamp	Paid
Statistical Thinking in Python (Part 1)	After all of the hard work of acquiring data and getting them into a form you can work with, you ultimately want to make clear, succinct conclusions from them. This crucial last step of a data analysis pipeline hinges on the principles of statistical inference. In this course, you will start building the foundation you need to think statistically, speak the language of your data, and understand what your data is telling you. The foundations of statistical thinking took decades to build, but can be grasped much faster today with the help of computers. With the power of Python-based tools, you will rapidly get up-to-speed and begin thinking statistically by the end of this course.	Datacamp	Paid

Machine Learning / Deep Learning / AI

Course	Description	Venue	Cost
Machine Learning Mastery	The benefit of machine learning are the predictions and the models that make predictions. To have skill at applied machine learning means knowing how to consistently and reliably deliver high-quality predictions on problem after problem. You need to follow a systematic process. Below is a 5-step process that you can follow to consistently achieve above average results on predictive modeling problem	Self Contained	Free
Introduction - Deep Learning and Neural Networks with Python and Pytorch p.1	Hello and welcome to a deep learning with Python and Pytorch tutorial series. It's been a while since I last did a full coverage of deep learning on a lower level, and quite a few things have changed both in the field and regarding my understanding of deep learning. For this series, I am going to be using Pytorch as our deep learning framework, though later on in the series we will also build a neural network from scratch. I also have a tutorial miniseries for machine learning with Tensorflow and Keras if you're looking for TensorFlow specifically. Once you know one framework and how neural networks work, you should be able to move freely between the other frameworks quite easily.	Pythonprogramming.net	Free
Q-Learning introduction and Q Table - Reinforcement Learning w/ Python Tutorial p.1	Welcome to a reinforcement learning tutorial. In this part, we're going to focus on Q-Learning. Q-Learning is a model-free form of machine learning, in the sense that the AI "agent" does not need to know or have a model of the environment that it will be in. The same algorithm can be used across a variety of environments.	Pythonprogramming.net	Free
Practical Machine Learning Tutorial with Python Introduction	Hello girls and guys, welcome to an in-depth and practical machine learning course. The objective of this course is to give you a wholistic understanding of machine learning, covering theory, application, and inner workings of supervised, unsupervised, and deep learning algorithms. In this series, we'll be covering linear regression, K Nearest Neighbors, Support Vector Machines (SVM), flat clustering, hierarchical clustering, and neural networks.	Pythonprogramming.net	Free
Generative Model Basics (Character-Level) - Unconventional Neural Networks in Python and Tensorflow p.1	Hello and welcome to a series where we will just be playing around with neural networks. The idea here is to poke around with various neural networks, doing unconventional things with them. Doing things like trying to teach a sequence to sequence model math, doing classification with a generative model, and so on. I've wanted to do this in some tutorials, but haven't thought of a way to compile them, this will have to do!	Pythonprogramming.net	Free

Machine Learning with Python: A Practical Introduction	Machine Learning can be an incredibly beneficial tool to uncover hidden insights and predict future trends. This Machine Learning with Python course will give you all the tools you need to get started with supervised and unsupervised learning.	IBM via edX	Free Audit, Paid Certificate
Principles of Machine Learning: Python Edition	Get hands-on experience building and deriving insights from machine learning models using Python and Azure Notebooks.	Microsoft via edX	Free Audit, Paid Certificate
Essential Math for Machine Learning: R Edition	Learn the essential mathematical foundations for machine learning and artificial intelligence.	Microsoft via edX	Free Audit, Paid Certificate
Principles of Machine Learning: R edition	Get hands-on experience building and deriving insights from machine learning models using R and Azure Notebooks.	Microsoft via edX	Free Audit, Paid Certificate
Essential Math for Machine Learning: Python Edition	Learn the essential mathematical foundations for machine learning and artificial intelligence.	Microsoft via edX	Free Audit, Paid Certificate
Machine Learning with Python: A Practical Introduction	Machine Learning can be an incredibly beneficial tool to uncover hidden insights and predict future trends. This Machine Learning with Python course will give you all the tools you need to get started with supervised and unsupervised learning.	IBM via edX	Free Audit, Paid Certificate
Machine Learning with Python: from Linear Models to Deep Learning	An in-depth introduction to the field of machine learning, from linear models to deep learning and reinforcement learning, through hands-on Python projects. -- Course 4 of 4 in the MITx MicroMasters program in Statistics and Data Science.	MIT via edX	Free Audit, Paid Certificate
Deep Learning Explained	Learn an intuitive approach to building the complex models that help machines solve real-world problems with human-like intelligence.	Microsoft via edX	Free Audit, Paid Certificate

Deep Learning with Python and PyTorch	Learn how to use Python and its popular libraries such as NumPy and Pandas, as well as the PyTorch Deep Learning library. You'll then apply them to build Neural Networks and Deep Learning models.	IBM via edX	Free Audit, Paid Certificate
Introduction to Machine Learning	This online machine learning course is perfect for those who have a solid basis in R and statistics, but are complete beginners with machine learning. After a broad overview of the discipline's most common techniques and applications, you'll gain more insight into the assessment and training of different machine learning models. The rest of the course is dedicated to a first reconnaissance with three of the most basic machine learning tasks: classification, regression and clustering.	Data camp	Paid
IBM Applied AI Professional Certificate	Artificial Intelligence (AI) is transforming our world. Whether you're a student, developer, or a technology consultant, understanding AI and knowing how to create AI powered applications can give you an edge in your career. This Professional Certificate is designed to arm you with the skills to work as an AI Application Developer.	IBM via Coursera	Paid
Master of Machine Learning and Data Science	Online Master's Degree in Machine Learning and Data Science	Imperial College London via Coursera	Paid
Introduction to Deep Learning in Python	Deep learning is the machine learning technique behind the most exciting capabilities in diverse areas like robotics, natural language processing, image recognition, and artificial intelligence, including the famous AlphaGo. In this course, you'll gain hands-on, practical knowledge of how to use deep learning with Keras 2.0, the latest version of a cutting-edge library for deep learning in Python.	Data camp	Paid

Git/Github

Course	Description	Venue	Cost
Git Started with GitHub	This course is designed to jump right into showing how Git and GitHub work together, focusing on the Git basic workflow. Students can expect to learn the minimum needed to start using Git in about 30 minutes.	Udemy	Free
The Ultimate GIT 5-day Challenge	This course takes us step-by-step through some basic GIT operations. The course will not dive too deep, and takes small steps on each of five days. As we continue through the course, we learn a basic, single-person workflow that could allow anyone to store files at GitHub or BitBucket. Additionally, the course gives us a chance to determine if we want to go to a deeper level with GIT.	Udemy	Free
Command Line Essentials: Git Bash for Windows	This course is designed to cut academic theory to just the key concepts and focus on basics tasks in the Bash command line in order to be productive quickly. Students can expect to learn the minimum needed to start using the Bash shell in less than an hour.	Udemy	Free
Lean Git	Ever have an "I lost all my work and I have a deadline the next day" moment? Git is the most popular version control tool—something that developers use to save all relevant versions of their work to avoid moments like those. Git also makes it easy for developers to collaborate and share work with others! Take-Away Skills: Git, simply put, is a tool to save versions of your code. This course will teach you a basic workflow and Git's core features, different ways to undo changes or save multiple versions of a project, and how to collaborate with other developers.	Codeacademy	Free
Learn Git Branching	Interested in learning Git? Well you've come to the right place! "Learn Git Branching" is the most visual and interactive way to learn Git on the web; you'll be challenged with exciting levels, given step-by-step demonstrations of powerful features, and maybe even have a bit of fun along the way.	Self contained	Free
GitHub Learning Lab	Learn new skills by completing fun, realistic projects in your very own GitHub repository. Get advice and helpful feedback from our friendly Learning Lab bot.	github	Free

Get it	Git-it is a desktop (Mac, Windows and Linux) app that teaches you how to use Git and GitHub on the command line.	SelfContained	Free
Learn Version Control with Git A step-by-step course for the complete beginner	Version control is an essential tool if you want to be successful in today's web & software world. This video course will take you from novice to master. Easily.	Tower	Free
Getting Git Right	Getting Git right, with tutorials, news, and tips	Atlassian	Free
Git Complete: The definitive, step-by-step guide to Git	Go from zero to hero with Git source control step-by-step with easy to understand examples. Become the next Git expert!	Udemy	Paid
Git Fundamentals	Git is a popular distributed version control system (DVCS). In this course, learn how to create a local repository, commit files, push changes to a remote repository, fix errors in your commits, and many of Git's other features. Understand the difference between the working copy, staging area, and repository itself. Come learn the power of Git.	Pluralsight	Paid

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