DS:

[Home · jupyter/jupyter Wiki · GitHub](https://github.com/jupyter/jupyter/wiki#general-python-programming)

[Data Cleaning using Python with Pandas Library | by Tanu N Prabhu | Towards Data Science](https://towardsdatascience.com/data-cleaning-with-python-using-pandas-library-c6f4a68ea8eb)

[Portfolio Muhammad Usman](https://vecho.pythonanywhere.com/)

[public-apis/public-apis: A collective list of free APIs](https://github.com/public-apis/public-apis#animals)

[raunakbhutoria/IBM-Data-Science-Projects: This repository contains the final projects for courses in the IBM Data Science Professional Certificate on Coursera.](https://github.com/raunakbhutoria/IBM-Data-Science-Projects/tree/master)

[Getting started with plotly in Python](https://plotly.com/python/getting-started/)

[Plotly express in Python](https://plotly.com/python/plotly-express/)

[Dash Documentation & User Guide | Plotly](https://dash.plotly.com/)

[Part 2. Basic Callbacks | Dash for Python Documentation | Plotly](https://dash.plotly.com/basic-callbacks)

[Deploying Jupyter notebook as a web app with Heroku | by NAQUIB ALAM | Analytics Vidhya | Medium](https://medium.com/analytics-vidhya/deploying-jupyter-notebook-as-a-web-app-with-heroku-d157b68bcccc)

[And Voilà!. … from Jupyter notebooks to standalone… | by QuantStack | Jupyter Blog](https://blog.jupyter.org/and-voil%C3%A0-f6a2c08a4a93)

[Lambda Functions In Python | Easy & Effective Ways to Use Them](https://www.analyticsvidhya.com/blog/2020/03/what-are-lambda-functions-in-python/)

[EDA: Exploratory Data Analysis | Introduction to Exploratory Data Analysis](https://www.analyticsvidhya.com/blog/2021/02/introduction-to-exploratory-data-analysis-eda/?utm_source=reading_list&utm_medium=https://www.analyticsvidhya.com/blog/2017/09/common-machine-learning-algorithms/)

CLOUD:

[Introduction to Cloud Computing with Amazon Web Services | Udemy](https://www.udemy.com/course/introduction-to-cloud-computing-with-amazon-web-services/?LSNPUBID=JVFxdTr9V80&ranEAID=JVFxdTr9V80&ranMID=39197&ranSiteID=JVFxdTr9V80-7IWOtVBS4qWruwphWMq6Ng&utm_medium=udemyads&utm_source=aff-campaign)

[Cloud Computing Concepts, Part 1 | Coursera](https://www.coursera.org/learn/cloud-computing?irclickid=UEL2jex6GxyPUe11dh0VMRcPUkFzIxWO22t9Tw0&irgwc=1&utm_medium=partners&utm_source=impact&utm_campaign=3294490&utm_content=b2c)

[AWS Skill Builder](https://explore.skillbuilder.aws/learn/course/external/view/elearning/9449/exam-prep-aws-certified-cloud-practitioner-foundations)

[AWS Certified Cloud Practitioner Certification | AWS Certification | AWS](https://aws.amazon.com/certification/certified-cloud-practitioner/?c=sec&sec=resources)

[Introduction to Cloud Computing | Coursera](https://www.coursera.org/learn/introduction-to-cloud?irclickid=UEL2jex6GxyPUe11dh0VMRcPUkFzIxXG22t9Tw0&irgwc=1&utm_medium=partners&utm_source=impact&utm_campaign=3294490&utm_content=b2c)

[Free Amazon AWS Tutorial - Cloud Computing With Amazon Web Services | Udemy](https://www.udemy.com/course/cloud-computing-with-amazon-web-services-part-1/?ranMID=39197&ranEAID=JVFxdTr9V80&ranSiteID=JVFxdTr9V80-qDWuTf5eGvESzEYLsZ3Jug&LSNPUBID=JVFxdTr9V80&utm_source=aff-campaign&utm_medium=udemyads)

[Google Cloud Skills Boost](https://www.cloudskillsboost.google/)

[New Google Cloud generative AI training resources | Google Cloud Blog](https://cloud.google.com/blog/topics/training-certifications/new-google-cloud-generative-ai-training-resources)

WEBDEV:

[ARIA Authoring Practices Guide | APG | WAI | W3C](https://www.w3.org/WAI/ARIA/apg/)

[ARIA in HTML](https://w3c.github.io/html-aria/)

[Lodash](https://lodash.com/)

[Home](https://moment.github.io/luxon/#/)

[JavaScript Unit Testing Tutorial | BrowserStack](https://www.browserstack.com/guide/unit-testing-in-javascript)

[The Essential Meta Tags for Social Media | CSS-Tricks - CSS-Tricks](https://css-tricks.com/essential-meta-tags-social-media/)

SHELL AND GIT:

[Top (Bash Reference Manual)](https://www.gnu.org/software/bash/manual/html_node/index.html#SEC_Contents)

[Redirections (Bash Reference Manual)](https://www.gnu.org/software/bash/manual/html_node/Redirections.html#Redirections)

[Bash scripting cheatsheet](https://devhints.io/bash)

[GNU grep cheatsheet](https://devhints.io/grep)

[grep(1) - Linux manual page](https://man7.org/linux/man-pages/man1/grep.1.html)

[Vim (text editor) - Wikipedia](https://en.wikipedia.org/wiki/Vim_(text_editor))

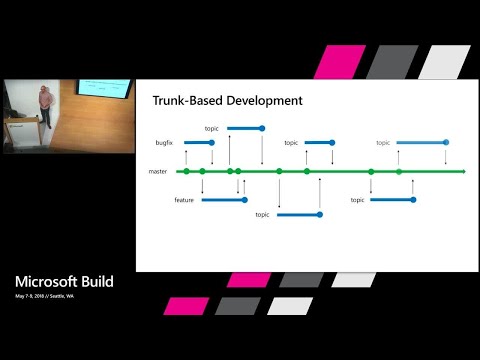
[Absolute and Relative Pathnames in UNIX - GeeksforGeeks](https://www.geeksforgeeks.org/absolute-relative-pathnames-unix/)

[Bash & Unix Commands Cheat Sheet by Jluis - Download free from Cheatography - Cheatography.com: Cheat Sheets For Every Occasion](https://cheatography.com/jluis/cheat-sheets/bash-and-unix-commands/)

[Vim Cheat Sheet](https://vim.rtorr.com/)

[git-cheat-sheet-education](https://education.github.com/git-cheat-sheet-education.pdf)

[(15) Git patterns and anti-patterns for successful developers : Build 2018 - YouTube](https://www.youtube.com/watch?v=ykZbBD-CmP8)

[](https://www.youtube.com/watch?v=ykZbBD-CmP8)

[Vim cheatsheet](https://devhints.io/vim)

NLP:

[Introduction - Hugging Face NLP Course](https://huggingface.co/learn/nlp-course/chapter3/1?fw=pt)

[Transformer (Demo) | Kaggle](https://www.kaggle.com/code/phunghieu/transformer-demo)

[Language Modeling with nn.Transformer and torchtext — PyTorch Tutorials 2.0.1+cu117 documentation](https://pytorch.org/tutorials/beginner/transformer_tutorial.html#:~:text=ntokens%20%3D%20len%28vocab%29%20emsize%20%3D%20200%20d_hid%20%3D,model%20%3D%20TransformerModel%28ntokens%2C%20emsize%2C%20nhead%2C%20d_hid%2C%20nlayers%2C%20dropout%29.to%28device%29)

[The Ultimate Guide to Transformer Deep Learning](https://www.turing.com/kb/brief-introduction-to-transformers-and-their-power)

[Build your own Transformer from scratch using Pytorch | by Arjun Sarkar | Towards Data Science](https://towardsdatascience.com/build-your-own-transformer-from-scratch-using-pytorch-84c850470dcb)

[Fine-tune Longformer Encoder-Decoder (LED) for Summarization on pubmed - Colaboratory](https://colab.research.google.com/github/patrickvonplaten/notebooks/blob/master/Fine_tune_Longformer_Encoder_Decoder_(LED)_for_Summarization_on_pubmed.ipynb#scrollTo=o9IkphgF-90-)

[LED](https://huggingface.co/docs/transformers/model_doc/led)

[Exploratory Data Analysis for Natural Language Processing: A Complete Guide to Python Tools](https://neptune.ai/blog/exploratory-data-analysis-natural-language-processing-tools)

[Must Known Techniques for text preprocessing in NLP](https://www.analyticsvidhya.com/blog/2021/06/must-known-techniques-for-text-preprocessing-in-nlp/)

[Text Preprocessing in Natural Language Processing | by Harshith | Towards Data Science](https://towardsdatascience.com/text-preprocessing-in-natural-language-processing-using-python-6113ff5decd8)

[Data Cleaning in Python | Text Data Cleaning in Python](https://www.analyticsvidhya.com/blog/2014/11/text-data-cleaning-steps-python/)

[A Complete Exploratory Data Analysis and Visualization for Text Data | by Susan Li | Towards Data Science](https://towardsdatascience.com/a-complete-exploratory-data-analysis-and-visualization-for-text-data-29fb1b96fb6a)

[Foundations of Statistical Natural Language Processing](https://nlp.stanford.edu/fsnlp/)

Courses:

[Harvard University: Introduction to Data Science with Python | edX](https://www.edx.org/course/introduction-to-data-science-with-python?index=product&objectID=course-c2004e8e-3882-4927-a883-1c5f39a28865&webview=false&campaign=Introduction+to+Data+Science+with+Python&source=edX&product_category=course&placement_url=https%3A%2F%2Fwww.edx.org%2Flearn%2Fdata-science)

[Massachusetts Institute of Technology: Machine Learning with Python: from Linear Models to Deep Learning | edX](https://www.edx.org/course/machine-learning-with-python-from-linear-models-to?index=product&objectID=course-4c70ad9b-9602-49af-bf00-83fa4bf47708&webview=false&campaign=Machine+Learning+with+Python%3A+from+Linear+Models+to+Deep+Learning&source=edX&product_category=course&placement_url=https%3A%2F%2Fwww.edx.org%2Flearn%2Fmachine-learning)

[Massachusetts Institute of Technology: Fundamentals of Statistics | edX](https://www.edx.org/course/fundamentals-of-statistics?index=product&objectID=course-54f10d8d-e1cd-44a9-9fe3-af78afe8a9ed&webview=false&campaign=Fundamentals+of+Statistics&source=edX&product_category=course&placement_url=https%3A%2F%2Fwww.edx.org%2Flearn%2Fstatistics)

[Stanford University: Statistical Learning | edX](https://www.edx.org/course/statistical-learning?index=product&objectID=course-ef2fc3ac-b0bc-4004-bd30-d610832d0cdd&webview=false&campaign=Statistical+Learning&source=edX&product_category=course&placement_url=https%3A%2F%2Fwww.edx.org%2Flearn%2Fstatistics)

[IBM: Introduction to Statistics for Data Science using Python | edX](https://www.edx.org/course/introduction-to-statistics-for-data-science-using-python?index=product&objectID=course-ae9667ef-a636-465c-a342-25492f42a954&webview=false&campaign=Introduction+to+Statistics+for+Data+Science+using+Python&source=edX&product_category=course&placement_url=https%3A%2F%2Fwww.edx.org%2Flearn%2Fstatistics)

[AI Product Management | Coursera](https://www.coursera.org/programs/dlsei-phase-2-52jvh/specializations/ai-product-management-duke#courses)

[Practical Deep Learning for Coders - Practical Deep Learning](https://course.fast.ai/)

[TensorFlow 2 for Deep Learning | Coursera](https://www.coursera.org/specializations/tensorflow2-deeplearning#courses)

[fast.ai - Introduction to Machine Learning for Coders: Launch](https://www.fast.ai/posts/2018-09-26-ml-launch.html)

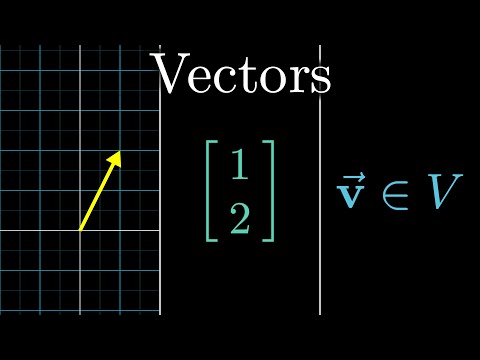
[Leadership and Communication Professional Certificate | edX](https://www.edx.org/professional-certificate/harvardx-leadership-and-communication?index=product&objectID=program-6aeb6b78-132a-449d-9052-83214aff78a0&webview=false&campaign=Leadership+and+Communication&source=edX&product_category=professional-certificate&placement_url=https%3A%2F%2Fwww.edx.org%2Flearn%2Fleadership)

[AI Product Management | Coursera](https://www.coursera.org/programs/dlsei-phase-2-52jvh/specializations/ai-product-management-duke)

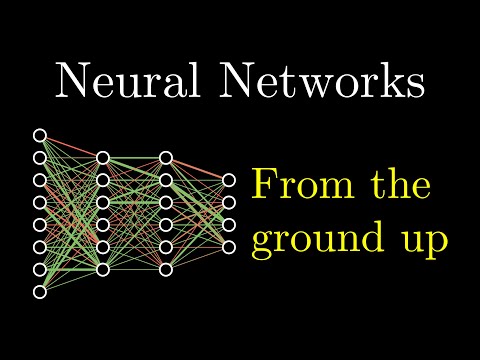
[Bayesian Statistics | Coursera](https://www.coursera.org/specializations/bayesian-statistics#courses)

[Mathematics for Machine Learning | Coursera](https://www.coursera.org/specializations/mathematics-machine-learning)

[(40) Essence of linear algebra - YouTube](https://www.youtube.com/playlist?list=PLZHQObOWTQDPD3MizzM2xVFitgF8hE_ab)

[](https://www.youtube.com/playlist?list=PLZHQObOWTQDPD3MizzM2xVFitgF8hE_ab)

[(40) Neural networks - YouTube](https://www.youtube.com/playlist?list=PLZHQObOWTQDNU6R1_67000Dx_ZCJB-3pi)

[](https://www.youtube.com/playlist?list=PLZHQObOWTQDNU6R1_67000Dx_ZCJB-3pi)

[Statistics and Data Science MicroMasters® Program | edX](https://www.edx.org/micromasters/mitx-statistics-and-data-science)

[Free Course on Naïve Bayes in Machine Learning from Scratch](https://courses.analyticsvidhya.com/courses/naive-bayes?utm_source=blog&utm_medium=naive-bayes-explained)

ML:

[Lectures from the 2012 Coursera course: <br> Neural Networks for Machine Learning](https://www.cs.toronto.edu/~hinton/coursera_lectures.html)

[ageron/tf2\_course: Notebooks for my "Deep Learning with TensorFlow 2 and Keras" course](https://github.com/ageron/tf2_course)

[ageron/handson-ml3: A series of Jupyter notebooks that walk you through the fundamentals of Machine Learning and Deep Learning in Python using Scikit-Learn, Keras and TensorFlow 2.](https://github.com/ageron/handson-ml3)

[IT02ArtificialIntelligenceDeeplearningandMachinelearning.pdf](https://navttc.gov.pk/NVQs/LessonPlanCourseContent/IT02ArtificialIntelligenceDeeplearningandMachinelearning.pdf)

[House Prices - Advanced Regression Techniques | Kaggle](https://www.kaggle.com/competitions/house-prices-advanced-regression-techniques/code)

[fchollet/deep-learning-with-python-notebooks: Jupyter notebooks for the code samples of the book "Deep Learning with Python"](https://github.com/fchollet/deep-learning-with-python-notebooks)

[CSC2535S Spring 2013 Home Page](https://www.cs.toronto.edu/~hinton/csc2535/index.html)

[How You Should Read Research Papers According To Andrew Ng (Stanford Deep Learning Lectures) | by Richmond Alake | Towards Data Science](https://towardsdatascience.com/how-you-should-read-research-papers-according-to-andrew-ng-stanford-deep-learning-lectures-98ecbd3ccfb3)

[a](https://docs.google.com/spreadsheets/d/1mjg0mI3XCgK98CXGRGplMzUxNdlkOVltV2EjEY9petI/edit)

[Regularization of Linear Models with SKLearn | by Robert Thas John | Coinmonks | Medium](https://medium.com/coinmonks/regularization-of-linear-models-with-sklearn-f88633a93a2)

[Unsupervised Feature Learning and Deep Learning Tutorial](http://deeplearning.stanford.edu/tutorial/supervised/SoftmaxRegression/#:~:text=Softmax%20regression%20(or%20multinomial%20logistic,kinds%20of%20hand%2Dwritten%20digits.)

[A Comprehensive Guide to Named Entity Recognition (NER)](https://www.turing.com/kb/a-comprehensive-guide-to-named-entity-recognition)

[Calculus on Computational Graphs: Backpropagation -- colah's blog](https://colah.github.io/posts/2015-08-Backprop/)

[ff2.pdf](http://www.cs.columbia.edu/~mcollins/ff2.pdf)

[An introduction to the Adam optimizer (a variant of gradient descent) - Machine Learning Specialization / MLS Resources - DeepLearning.AI](https://community.deeplearning.ai/t/an-introduction-to-the-adam-optimizer-a-variant-of-gradient-descent/225930)

[The Mechanics of Machine Learning](https://mlbook.explained.ai/)

[ROC curve and AUC (area under the ROC curve) - Machine Learning Specialization / MLS Resources - DeepLearning.AI](https://community.deeplearning.ai/t/roc-curve-and-auc-area-under-the-roc-curve/224140)

[Support Vector Machine Algorithm - Machine Learning Specialization / MLS Resources - DeepLearning.AI](https://community.deeplearning.ai/t/support-vector-machine-algorithm/223549)

[Suggestions for learning maths - Advanced Learning Algorithms / Week 1 Advanced Learning Algorithms - DeepLearning.AI](https://community.deeplearning.ai/t/suggestions-for-learning-maths/217245/3)

[Moving forward from Machine Learning Specialization! - Machine Learning Specialization / MLS Resources - DeepLearning.AI](https://community.deeplearning.ai/t/moving-forward-from-machine-learning-specialization/179784)

[8 Clustering Algorithms in Machine Learning that All Data Scientists Should Know](https://www.freecodecamp.org/news/8-clustering-algorithms-in-machine-learning-that-all-data-scientists-should-know/)

[Determining The Optimal Number Of Clusters: 3 Must Know Methods - Datanovia](https://www.datanovia.com/en/lessons/determining-the-optimal-number-of-clusters-3-must-know-methods/)

[Learn Naive Bayes Algorithm | Naive Bayes Classifier Examples](https://www.analyticsvidhya.com/blog/2017/09/naive-bayes-explained/)

[Gradient Boosting Algorithm: A Complete Guide for Beginners](https://www.analyticsvidhya.com/blog/2021/09/gradient-boosting-algorithm-a-complete-guide-for-beginners/)

[Guide on Support Vector Machine (SVM) Algorithm](https://www.analyticsvidhya.com/blog/2021/10/support-vector-machinessvm-a-complete-guide-for-beginners/)

[Support Vector Machine (SVM) Algorithm - GeeksforGeeks](https://www.geeksforgeeks.org/support-vector-machine-algorithm/)

[Support Vector Machine — Introduction to Machine Learning Algorithms | by Rohith Gandhi | Towards Data Science](https://towardsdatascience.com/support-vector-machine-introduction-to-machine-learning-algorithms-934a444fca47)