Free Data Science learning resources. You can learn data science for nothing. This is a data science learning path. I will add to this list as I discover more content. ►Subscribe to my YouTube Channel [http://bit.ly/2LCdOy1](https://www.youtube.com/redirect?redir_token=QUFFLUhqa0RMOVRFUjZRbHRncDNoci1XQ3Nud3pPRmFxUXxBQ3Jtc0tuU01kUURlV3dqWW9pNzJpQU5BYjBCUjkxOHUtbkJJRjhBTTRpMnJYMFlCbUFQZE1obGNoTDJjUU56RVdfQ1o4YUJqaHdaNk5WMUFjcWhVZHlsdEcwQkVQc0xxNU9BVmF5Y1hjX3pKd3VucXZkaUh6aw%3D%3D&v=eTxyviU0Ddo&q=http%3A%2F%2Fbit.ly%2F2LCdOy1&event=video_description) MY (PAID FOR) PYTHON COURSE IS AVAILABLE HERE [https://www.udemy.com/course/the-comp...](https://www.youtube.com/redirect?redir_token=QUFFLUhqbG5vR2NvZUd4WXJJb1FqaHJxMkhfNjM2V21HQXxBQ3Jtc0trdUlvWGxsZmtyT25hLTZyREhzR2hTcFI1a25xUE5RYktfTmFXNU5ZQW95VExSX2cwX09hLThZS3NxNmt0TjR5SUVxaWRqVHhHaFprNF9rOXBDc1N6YktEQWhfNEpBSmo0ZjFiV2pPeFVpWXhCdnV0dw%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fwww.udemy.com%2Fcourse%2Fthe-complete-python-programmer-bootcamp%2F%3FreferralCode%3D9DADED2911F751592765&event=video_description) Music by bensound.com PYTHON BASICS Introduction to Python, The Scientific Libraries, Advanced Python Programming and the Pandas Section of Data and Empirics [https://lectures.quantecon.org/py/](https://www.youtube.com/redirect?redir_token=QUFFLUhqbWNSMzd1RmRIVkZZYUlrYXlGVEhMa0lacXBiQXxBQ3Jtc0tsalQ1ZEtrUGZqaWo1cVZlRVJPRnAxNmVVNkF4OE1PWUd0ZXZOa1hheXpGN2hKZlp4cHVFd3pyUEEwbWJ6QTZDOTRFLTRzRmZqcDFwU3ZIV0UzZlNMcFlKTVExUEdQS2VtaWwyb0ZwdUthemhfc1BLSQ%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Flectures.quantecon.org%2Fpy%2F&event=video_description) Chapters 1 - 4 in this book [https://github.com/jakevdp/PythonData...](https://www.youtube.com/redirect?redir_token=QUFFLUhqbmFZaFRFUE81ZTlnalFIWjFuLUJhN2JiUXRBQXxBQ3Jtc0tsMDl6UkdaSU00YmV2eko2bkplekdwbUVoWFhkdy14LThTZFFkQTBEQzJHN0M4X25QNzhMSFI2akZrYTh2RjIzb1JzZHE0VTJJbG1RejJoMGhmSEoxZkZQNWJlcllWX3c1MFdhdnJRZE8tYXpSNGREdw%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fgithub.com%2Fjakevdp%2FPythonDataScienceHandbook%2Fblob%2F8a34a4f653bdbdc01415a94dc20d4e9b97438965%2Fnotebooks%2FIndex.ipynb&event=video_description) Then this Pandas tutorial [https://pandas.pydata.org/pandas-docs...](https://www.youtube.com/redirect?redir_token=QUFFLUhqbmN4UUZQVWF5T053R2ZZQ1hHaWF1TVo3d3UyUXxBQ3Jtc0tuNlRkcFhLVWZGcDhrb3ZWMHVrRFl4R1pXRG1fMFJnaGZGdloxRzV1alFFOF9faklKbjQ5TGY5Y21oelVSeEFZdFRSMl9DYjJGTHliZzFOUmFYVVVMX1ZQUFpxRU9wRG1pTi1MVk5NanYyLWYtU3FMNA%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fpandas.pydata.org%2Fpandas-docs%2Fstable%2Fgetting_started%2F10min.html&event=video_description) Here are some excellent pandas code examples [https://github.com/wesm/pydata-book](https://www.youtube.com/redirect?redir_token=QUFFLUhqbVUycEJxQzZyQUUxLW9QUnVuMm9FTnFpeGVSUXxBQ3Jtc0ttRWRXay1kallCZFlKemtrV2RJQzNfS3JrTFd5YWctV0tZNHpUTzF0UDkyTnhZOVl1anhzd0h1VEE1WTd6TU1ZX20tYm1TcWRiMHQ0SE9sZTZPVkxDbG9iTEJDbDJhdU9ldWpZQThCWHdJaERpT3Bxcw%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fgithub.com%2Fwesm%2Fpydata-book&event=video_description) MATHS LINEAR ALGEBRA Essence of Linear Algebra [https://www.youtube.com/watch?v=fNk\_z...](https://www.youtube.com/watch?v=fNk_zzaMoSs&list=PLZHQObOWTQDPD3MizzM2xVFitgF8hE_ab) Khan Academy [https://www.khanacademy.org/math/line...](https://www.youtube.com/redirect?redir_token=QUFFLUhqbm1VdF9qbEVJQnBmcFB3d0lwQm5CSjQwSlFTQXxBQ3Jtc0tuRU5ucEx1bzM0WVRMc1pKVHlkLWNuVkFFZkhKQ3RHN0lNWmlQVW9RdXo2dXlxUVlwcklENUFkRWk2WnlZemg1d2ZGQnNUWUdvMldlZlhjb3BfRWN5WWRmeUJEbTlFeFl4Rjc5emlHODhWQ0FwOEs4WQ%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fwww.khanacademy.org%2Fmath%2Flinear-algebra&event=video_description) [https://betterexplained.com/articles/...](https://www.youtube.com/redirect?redir_token=QUFFLUhqbVJNbVVPdXBzMWJXc2FJMkEyMVFDenZyZTdZZ3xBQ3Jtc0tsY0wwODRoaVRfaUVwUGpnY19jdFJiSlBoU0tta0JwZE0tMVFtdldpNTVkUUc0aXM1VFZNNUhPaUhlSHQ1VjBjem1YX2dCWVdMUHNIdEVQbUE1UlJVd29JNVFSb2dOWWs1TDdBZklNeDl3MlF4N1V1aw%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fbetterexplained.com%2Farticles%2Flinear-algebra-guide%2F&event=video_description) Introduction to Methods of Applied Mathematics [http://physics.bgu.ac.il/~gedalin/Tea...](https://www.youtube.com/redirect?redir_token=QUFFLUhqa1Y4b29hNXZRVlVDQ19Dank5aUNNb01yb2tBd3xBQ3Jtc0trQ00tSmR6NHlRdXZuZVNGTzBWSkRBei1GdWV4TFhaQW5lNmtXV1g2VGZBclBRcnE0eW5NU0hlYlZNY2ZURkZBSGJPa0lCdnE2Q1NJc3FNRjJCN2tNUmlKZV9Xc3RTT3FCcW1fV19MY2JXVUJPY0FiWQ%3D%3D&v=eTxyviU0Ddo&q=http%3A%2F%2Fphysics.bgu.ac.il%2F%7Egedalin%2FTeaching%2FMater%2Fam.pdf&event=video_description) Mathematical Tools for Physics [http://www.physics.miami.edu/~nearing...](https://www.youtube.com/redirect?redir_token=QUFFLUhqbTYwaXNSRmxGNzZ0dFV1dW9xOVhaYXAtZnduZ3xBQ3Jtc0ttMG9kOE1CRUJwamd0b0ZRY194RUtyZk1kQkxENHloRHhHRWRkVHVQT01mcVRtNXhudE1KZjRDU1BaRmQ1YldfcW9JNjFsZWRKLWduMzktbklRU3B3VkJkTnluY29NX2tSNXVYUENPTGdrMUstdWtBWQ%3D%3D&v=eTxyviU0Ddo&q=http%3A%2F%2Fwww.physics.miami.edu%2F%7Enearing%2Fmathmethods%2Fmathematical_methods-one.pdf&event=video_description) [https://www.math.ubc.ca/~carrell/NB.pdf](https://www.youtube.com/redirect?redir_token=QUFFLUhqbGNDTHA4cWdnNXpVM3U4N2trb2ZscVNNTW42d3xBQ3Jtc0trMmtfdGYwdE15NjNZWEw5UG1ZYUZzQ3RYY2lIQ2FtaG9OanVWbGJPQ1ZWcjFzbGxvbGxFSl9IT2R2YllYZVZjenRMbHN1RDluQkg1Z2lqQlN4dU9idWJ5eWVtVW9oRnM0NzBaWVlmOUhRSlBWUUF0dw%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fwww.math.ubc.ca%2F%7Ecarrell%2FNB.pdf&event=video_description) (Linear Algebra Reference) [https://math.byu.edu/~klkuttle/Essent...](https://www.youtube.com/redirect?redir_token=QUFFLUhqbkF0dzVPZlVQVkhjNDhFYm1uYjF2ZDg4SHN5QXxBQ3Jtc0tsMUg0UVFsaXVrdXBEN0tVMkQxT3Z6NkxXclNvZFVhZmlrQlA1M05EdURpQWFzblllUHlUYkU2dV9ZX3JmLWNuSTVKREFEc0pIanlsNjBRTWF0NHprUkotWkZNSTdURHc2SWpCNlFfbzVoRnJzWXlHdw%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fmath.byu.edu%2F%7Eklkuttle%2FEssentialLinearAlgebra.pdf&event=video_description) (Reference) CALCULUS Essence of Calculus [https://www.youtube.com/watch?v=WUvTy...](https://www.youtube.com/watch?v=WUvTyaaNkzM&list=PLZHQObOWTQDMsr9K-rj53DwVRMYO3t5Yr) [https://www.khanacademy.org/math/calc...](https://www.youtube.com/redirect?redir_token=QUFFLUhqazhTWDFsN3pvNGxnNFQ5MGl1NHlNM2t2cnZYUXxBQ3Jtc0trdmtCV21QTDV4QlJPcVdyNU54OE80OXdOUm9Xc2hkdHRJTXJGSzdxVTRxemdLMi0tX1dpX2tiOEFQRE1YbW1SUEZsWEJGdUZjSjJNWkxrWk9sLWdZYVJ2TGNySUY4azlNQUF1Rl9tbDdwdHA1cURJWQ%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fwww.khanacademy.org%2Fmath%2Fcalculus-1&event=video_description) [https://www.khanacademy.org/math/calc...](https://www.youtube.com/redirect?redir_token=QUFFLUhqbENrN2MxaXBTeUlHa3NfU3VhN1B6ZWRwMEFLd3xBQ3Jtc0tuM3V6dUZ4UUUwZzFoT0FDY2JqVHNkOG9pbUtrY3dlbVVTUnBVbVdFWTFzYThUeVZUOVA0SEMyY3l3cTl4LWI2cnZpV1ZHR2prVkw2QUFPNkFBenBuRXNWbGFvNUhVS0o1enFGSVVpU0tCWVc1aHRoMA%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fwww.khanacademy.org%2Fmath%2Fcalculus-2&event=video_description) [https://www.khanacademy.org/math/mult...](https://www.youtube.com/redirect?redir_token=QUFFLUhqbWNHY0ctZkppcHBUTEFtOHczSjI3ZzdmNWNkZ3xBQ3Jtc0trVHVoYXRBazhIU2Eteks5TXl2amd5RklSbXJaU3MzLUZ2aUY5QUpPb1NnQXNNU212LXliaVFISTA4NTFUUHlwdnB5SFQ2eFBSMDZ4eUxKbzNyWUIybUJUTUlScnV4ZlFHaXpKX1JyMmYwWmI0OWVNaw%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fwww.khanacademy.org%2Fmath%2Fmultivariable-calculus&event=video_description) PRACTICE PYTHON PROJECTS [https://github.com/tuvtran/project-ba...](https://www.youtube.com/redirect?redir_token=QUFFLUhqbVYtOTlWSDMwTVRNRE5WNzBlNEc5ZE5fbmNFUXxBQ3Jtc0tucWlRZEYyZ25SRkZYcUlIUUVEN2ZxZFJ6SDVuUnd1RlJZaFU5M3BZWmtJYWJzTHZ4NWpJR3ZRUUM5SDZhSTVMRV9ObzV6M0d0c3N2Ykg5bmRrVFpnQzNtTlUwSUI4NTg2Z0dwSW5VRGxDbEs0aUVnbw%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fgithub.com%2Ftuvtran%2Fproject-based-learning%23python&event=video_description) [https://projecteuler.net/](https://www.youtube.com/redirect?redir_token=QUFFLUhqbjRNbHh2dVl1ZUFxSWY3WVVyNE1rX3d2MktJQXxBQ3Jtc0ttNlJpUklnN09EbEIydVNsMXBYcHJqYldidmdrM01oVnBtVnhfTElaOFUyVHYwZXg0b0paMVpDMDU5NU9OdnV3d3dCU0ZoQW1ZSk5MS0hMSWRROXNGemZNVl9OX2lNVDlKWHYxU201SHBUNERfNjBhMA%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fprojecteuler.net%2F&event=video_description) MORE PYTHON Work through as many of the examples as you fancy in Chapters 6 and 7 here [https://scipython.com/book/](https://www.youtube.com/redirect?redir_token=QUFFLUhqazVLNk0zTWFZWjRsVkVvbUg1OE11djVtNnVwQXxBQ3Jtc0tsMmJpbHJ4bjZyLW4tRHRYM2M3NnY4dDBZUW5MZDhxQ2F2TVNva3ZVVEprNWRBVFhwdjlldDdsRjAyNnN0VlNIVDBrQVZnQzh1MlVucjV2bjJCdFdWaW5xN2RkWE8xdEZsYU9kSGZRcmZSNmVrdFZGVQ%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fscipython.com%2Fbook%2F&event=video_description) DATA EXPLORATION [https://github.com/StephenElston/Expl...](https://www.youtube.com/redirect?redir_token=QUFFLUhqa3JXMTFPOWZ6d1NRZmdPNkFIUFY1YUxQdmstZ3xBQ3Jtc0trVmlNMm1qdk1PLWZGQmpMR2d1U244aloyNG9WNUdwbFh3aWdSVUZ3dFVhcTRrVnlNb0p0OGVJcTNRZ2R3X2E3UGZBVmlJdzMyRVpHTkVhRGZIOWFvbDBHM3JidmstQ2ZwMlhkX1RPdVktQTFEdURQdw%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fgithub.com%2FStephenElston%2FExploringDataWithPython%2Fblob%2Fmaster%2FLearningDataVisualization.ipynb&event=video_description) [https://www.kaggle.com/c/titanic#desc...](https://www.youtube.com/redirect?redir_token=QUFFLUhqa090bU5PYUxZcV9WOVBBSVdfQm1pQzdybzhkZ3xBQ3Jtc0trSGhBVFNaZ013RFZ1b3IzeXdONDk1RE9Hd01ZNzU1azQ2NzNYMWNyWHNfZFFlTWF0NHhGcEhjZXFsTGxUcV9Sb05hQ1JJQ0ZsOEZucV9KYmRaYUI1dUxDa2paMDFjM2FjN2tfUkxyTHFrM0NPcUNYQQ%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fwww.kaggle.com%2Fc%2Ftitanic%23description&event=video_description) PROBABILITY AND STATISTICS [https://www.khanacademy.org/math/stat...](https://www.youtube.com/redirect?redir_token=QUFFLUhqbXVnQ3kwVldfOTR0NHg3T2ktYVBOXzY3OTg2Z3xBQ3Jtc0tuOFZja09zb2FnclQzTmNBU1VnZ0pfZ2U0ay1BRFRsa0toRzVHTlJyTHlIZ1djNE1qYkQ4NXI3czJwSV9tMTVjdEplUGE3MEJoQmViU2pXTTFYUm5JUnVQeGpWZWxNNlBpV043RGhzLUpqb2FlYTBCbw%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fwww.khanacademy.org%2Fmath%2Fstatistics-probability&event=video_description) [http://greenteapress.com/thinkstats/t...](https://www.youtube.com/redirect?redir_token=QUFFLUhqbWltWDR0OHEtcHg3bkE1blNGdE1xZXVscWcxZ3xBQ3Jtc0trZ2pkeGZCc3VDcUhEbUVuemJMRG5aWFRlUDlQMzV2NkFKU1NKWVFDaDhTbGJwdnYwSFRmNXZKZTg0eGtOTVNfTU5CbVZZSnhtR1RDTkc3YVMxNjhqVkNacVhMVGJodmp4VTYtQ203eW1BckVuVzNHMA%3D%3D&v=eTxyviU0Ddo&q=http%3A%2F%2Fgreenteapress.com%2Fthinkstats%2Fthinkstats.pdf&event=video_description) [https://bookboon.com/en/applied-stati...](https://www.youtube.com/redirect?redir_token=QUFFLUhqbUVnTU1NV3pOTkFPUFA1dnczZlplQ3J3Skd0UXxBQ3Jtc0trb3ZlS2ZIcWlEN1R1OTNET2ZGZWlvOWZsQzF1WlhfNlB2amh4SEtIZDBWeW5ySG4tYjVGOF9VV1lvTFNwM0FBdjB1dDhzb210WU96Q2RsaS05NjkzZHBxUFNYSW11ak5WcU1EM09rQXl2eXlEaU5yZw%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fbookboon.com%2Fen%2Fapplied-statistics-ebook&event=video_description) [http://www.wzchen.com/probability-che...](https://www.youtube.com/redirect?redir_token=QUFFLUhqbVh1VGVDVG9PRmt2WWlMTXdIUXExMVB0Nk5kQXxBQ3Jtc0tuLTFqLWRydUFja1QydFBfbUFNSGJPRkdqS1FMX3Jrb0xpZm8xcnBWeXM5MDM2UW9NMjE0Vm53aXlrYThwOFprNVQ3Z0hnZmF0YjRuRjlLNmlmdktkb1o0c2k0R1gzbmFtT3FCVmcySnIwdmN1RjNiMA%3D%3D&v=eTxyviU0Ddo&q=http%3A%2F%2Fwww.wzchen.com%2Fprobability-cheatsheet%2F&event=video_description) STATISTICAL LEARNING An Introduction to Statistical Learning [https://www-bcf.usc.edu/~gareth/ISL/i...](https://www.youtube.com/redirect?redir_token=QUFFLUhqazY2Qk5sdzdXTUxPYmk2UE5WMkZ2R0VfekNjd3xBQ3Jtc0ttTHJ6Tk9DbEs3ZzJfWkx0ZVJVZlFvdU56Qld4RUluXzhTZXQ4Q1F6NlJLYjFaeTRUQkI4MElwd3hDMktrb3hOVU5Tc1hsTEVmZFFZbUJGeDF1aUJZcl80OThHQ2xTR19pR2FaZGhYWHRpVjlkRjBRYw%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fwww-bcf.usc.edu%2F%7Egareth%2FISL%2Findex.html&event=video_description) (Essential) [https://work.caltech.edu/telecourse.html](https://www.youtube.com/redirect?redir_token=QUFFLUhqbDFXVHpSZ05JUHMzN1VOR0RwUGtiLWVRbC03Z3xBQ3Jtc0tuNVZLNV94M2V1Q0hkU3p4SVFLX2stWHpNSXVzRDNqTk16d0JkZ2h3bXVYaHNVOXdaOTcwVHNpdl9EV2VvdDZDUFYwM0M3a2RDZk9ncy1vYjBLcGZZN3RzV2JhUzJRQzJ2c1pzR0pXT3ZEYkV0Y3h6TQ%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fwork.caltech.edu%2Ftelecourse.html&event=video_description) Elements of Statistical Learning (Extremely useful) [https://web.stanford.edu/~hastie/Elem...](https://www.youtube.com/redirect?redir_token=QUFFLUhqbHV5LUplZUlVOFFPUFo4Ml9sSVNtZmJSaklxQXxBQ3Jtc0tuYTlUcUlBZzE3a09UUFNkQ0lQWUthQ182VjNmWjg0Tk03UHZMR0xWcVZRLXppeHhqNVlFZGdERThuV0I5b0hYeHZlWHRRN2U2UWZPYnYxcXJpb3RvS3MzZlBVMEpnaWEyc2VyNDA1ZlI2cmxXbFdFRQ%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fweb.stanford.edu%2F%7Ehastie%2FElemStatLearn%2F&event=video_description) PYTHON AND DATA SCIENCE Chapter 5 Python Data Science Handbook [https://github.com/jakevdp/PythonData...](https://www.youtube.com/redirect?redir_token=QUFFLUhqbWRMRWI2YTA4bjl2SXJULW5FZEJ6OTRKd3FjUXxBQ3Jtc0tsZlNNR2pVYUNGZkhsbjRQNmF6M3VPakFJYVpPNFQxT3VjTXRiNnJpQWY1VnlKcmJnTzZMQWluaHdnOVJ5X1lUQ2tOS2t0NEEzaFFRZzN5VE1hbVFEQUVLTm1BUkxvQnl0a18zdlBXOWp0aVlndzZ4dw%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fgithub.com%2Fjakevdp%2FPythonDataScienceHandbook%2Fblob%2F8a34a4f653bdbdc01415a94dc20d4e9b97438965%2Fnotebooks%2FIndex.ipynb&event=video_description) [https://scikit-learn.org/stable/tutor...](https://www.youtube.com/redirect?redir_token=QUFFLUhqbHBrQ3lZVkJCdmU0MDV6NEZhOE9HcGlYV1IzQXxBQ3Jtc0ttangxMjk4NldKMmJHX1Z2cTBESHBIaExxSVJMUzJQRHU2NXhscEljT0F0aDVkZEs2cWdJdGdzN0xLX1Jmcmt5czRSbVRXSk5HUTN6ZkJOOW5YS2lxLXhudE9OYW1UR0Q0cFk1dDZ0LS1zc2c4NTR2RQ%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fscikit-learn.org%2Fstable%2Ftutorial%2Findex.html&event=video_description) DATA STRUCTURES AND ALGORITHMS IN PYTHON [https://eu.udacity.com/course/data-st...](https://www.youtube.com/redirect?redir_token=QUFFLUhqbFRfcUJxb2pOUldhVnBqZXplU2FaVWRYbWRhd3xBQ3Jtc0ttWnRjMmxiWHhqLXoyV2NIYmktbU9kS3JFV054cHZrRjd0dFR1TFpfV1ZWNWs5dlZjQW54M0hXek14UVRvZEJHYTMxN04zZ3lPbFB2Qkc0aWthWkgtLTNRbkJiLWZFQ3pYTnI5bXZBS0JONmxLM0lCdw%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Feu.udacity.com%2Fcourse%2Fdata-structures-and-algorithms-in-python--ud513&event=video_description) [http://interactivepython.org/runeston...](https://www.youtube.com/redirect?redir_token=QUFFLUhqbHk5d0tqZlM4TllfUHg5dU9DbW5vVjJpbk00Z3xBQ3Jtc0trWnE3OE1KZ1hnSk1qMnNXZ0FEZl95M00yMXZEcGNnQ25UdVY4UnRDQm4yck5sOWdXczVVb0ZMMTFlLWtuN1RrTmJrWFNEdUdpZllpYTRqdDlSc1RhXzRjWFRWNmpDYkt3NzdaMTZWSnFMWEhGb1Jfbw%3D%3D&v=eTxyviU0Ddo&q=http%3A%2F%2Finteractivepython.org%2Frunestone%2Fstatic%2Fpythonds%2Findex.html&event=video_description) TENSORFLOW [https://developers.google.com/machine...](https://www.youtube.com/redirect?redir_token=QUFFLUhqbDR0VFZvMWp1NXREN1NlTnpJUU5JWkVsNWV1QXxBQ3Jtc0tsalZ3YzNoQ2NWM3AwSHBKSXhJQXNreFg1RktFUVNyVENJN3pGQjNHX0NQU0hhcy05ZjRUS2VSLU1tNFZUemc5bmh4LXlWY1hqZUxYNU1Ub3NBYWdlQ2FrdTFROWp0V1BTVkktVHFwbFRfRkVhXzhQdw%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fdevelopers.google.com%2Fmachine-learning%2Fcrash-course%2F&event=video_description) SQL [https://www.khanacademy.org/computing...](https://www.youtube.com/redirect?redir_token=QUFFLUhqa2VFTkRpbktReWZGNVBnLWwySFFVZWx4SW5xd3xBQ3Jtc0tsdUl0b2Y2T2JhZEF2ODU4S0l0WVV4RVhMZUVpSWNsWXRsbGR1QWlhV1BXSnk4WS1jckNGbFJRV0tnUU5NZjAwb0duNVBkbTNIcmVob3ptWXhpQXRNaGZCbUlqNlloTTdPWmNESWM2OHJzUFJpekpOSQ%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fwww.khanacademy.org%2Fcomputing%2Fcomputer-programming%2Fsql&event=video_description) GIT AND VERSION CONTROL [https://git-scm.com/book/en/v2](https://www.youtube.com/redirect?redir_token=QUFFLUhqay1qSkI3b0lDMkNGN2MySHpFaXNKa0ZJREpZZ3xBQ3Jtc0tsa1dFLTdTYVlvaDJRQmUxeHJUNFB6S1BoVWhfWERDR1ExNUdpcTQ2NkxnUk9LVWhGVU8xNHRIU21rWU84QWdzOHBVLXJMRC1yR3g5OGtUUHY1WjMwODJpSlJLOGotRVJlUTVKWEZJMlZfY1FZYmRaVQ%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fgit-scm.com%2Fbook%2Fen%2Fv2&event=video_description) TAKE THIS CLASS [https://cs109.github.io/2015/index.html](https://www.youtube.com/redirect?redir_token=QUFFLUhqbkh5ODI0M015MlhneGZRc3lFRmxoT011UEwyZ3xBQ3Jtc0tuOGJtbUEwdk5LMlQ5Sm9FTjBreTMzNFppWkxESlc1WmtqaHZiNERvN3JfekREVXBHT0VUbzcwbk4wZXM5Wktoay0yOEVKai1TZWY3cW5oLTMwRXZMa3A1ZXZJOVpQNEhKQXREdjdsMlRPQ3hBSUEwTQ%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fcs109.github.io%2F2015%2Findex.html&event=video_description) R [https://www.r-bloggers.com/how-to-lea...](https://www.youtube.com/redirect?redir_token=QUFFLUhqbXQtQ2YySUp6anFZYXlIUWx2b2pvM2pnTHBJd3xBQ3Jtc0tuWUF4U1E2anZUakZkejJRX1lqZk1uRFhjdnVDeUU0WHFoMW96YmxNUllkSnN3TWVDZHNlMGNiWjlFdkQ2SlBsMnBqbVJGa0haWDdKdkdDRjZDMkhQUU44Znp5MWlxeHZpNnIxZG9QOG42VlN4eGxTNA%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fwww.r-bloggers.com%2Fhow-to-learn-r-2%2F&event=video_description) SUPPLEMENTARY MATERIAL [https://docs.python.org/3/tutorial/in...](https://www.youtube.com/redirect?redir_token=QUFFLUhqbU9sNmNoN1VzYW5rVkNIdmlRcm1tS25IRGgzUXxBQ3Jtc0tsZkhaWHRTM0ZWaEo1SjRQTy1ISnBCQ3lLSzNKRUxCVXJQZVZ0UFpJZ1dOMjFQcU1pc0N1dzlwOFV0RFY0SnhFb0tDX09yZXctR0dUWjJvZERuTktCSzdxM05MbW9JaFFiaHlfY1lPYmZkQVBoNFc0bw%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fdocs.python.org%2F3%2Ftutorial%2Findex.html&event=video_description) [https://www.reddit.com/r/Python/](https://www.youtube.com/redirect?redir_token=QUFFLUhqbEZTSGN1LWg4MWtTdkdSWDFZekNjVExOMDZyd3xBQ3Jtc0trSGt0dUxFV2RmRHhDOE9IVGI4QkVJamZxUjdVOTBCbDU1Y191RUk4d3Q2VkRZcEhLOC1tRjduYWM2d3piTnRlSGRrcGZrNzhHV1dwZEJmMUp4a1ZhMTdFcktXSlhkRzYyS2dPOFdGa0Q2c0pDZE9jdw%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fwww.reddit.com%2Fr%2FPython%2F&event=video_description) [https://www.reddit.com/r/datascience/](https://www.youtube.com/redirect?redir_token=QUFFLUhqbFJIREhDSFZtSHhieV9yczFDdTllRENpNUJhUXxBQ3Jtc0tsUkI3S194bVh1ZFIwQnhyWjFyYms3SHNTZzNFUjdZel9GS3dOSkRYLXpTUjJveFl2NzRRNkt2bnM2cm1ZN1NVRjBOdE9xMjA0dUZXU0EtQmQzZGlZSDRnLUNERHdQcEVOWmF3alpwYTJyTDJad0JYOA%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fwww.reddit.com%2Fr%2Fdatascience%2F&event=video_description) [https://stackoverflow.com/questions/t...](https://www.youtube.com/redirect?redir_token=QUFFLUhqbWYwWWdBTWdWSlh3U29TS1pYVERUbGstTmNVUXxBQ3Jtc0tueVFIdUhUTjh6SGZURG5TYVFxYXIzVmt5VnZZdHo0UjNUX3VfZUVnck53VUtiSXM4Y1Ewd3hDb3RWM3hOUDA4MlRmMU9rTzlOZjhENjdabk01WWM0X2w5dEdoWEhmRlpEU1psLTZCQWxnSzRaYU1IRQ%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fstackoverflow.com%2Fquestions%2Ftagged%2Fpython&event=video_description) [https://datascience.stackexchange.com/](https://www.youtube.com/redirect?redir_token=QUFFLUhqbWMzNFQ0RlQ3Mmxhb3BFQllSUVJTYkZhTWsyZ3xBQ3Jtc0trQlFHZlJIY3h1UlZ5SGJxSXo4eVhFT1R1Umx3QTJheDZkN0hNWkgwMmNTWTE1bzRjYkdaSS03T3kxTzdVYkxNRU9XRF9kUHlFcldwcF81Q1phM2JsUTFuY3pKV0FsbEtZU0xodExobnh5azlodDRzbw%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fdatascience.stackexchange.com%2F&event=video_description) [https://jupyter.org/](https://www.youtube.com/redirect?redir_token=QUFFLUhqa2pjRjg0N2EwNkM5Uy1fV1hiVjBKcXVFb3lxZ3xBQ3Jtc0traEQ4c0dRUnF2VlhvcWVfZElSbk1JTUlibTNkN3o5QWloRWh2eTZoY05WSi1BdW9tLUxOQ2lQWTRXOGY3ZXVDTm1xTWlvWlUyVFFzaEJNY0Exdy12QTdjYlNCZkdnc1U0UHFHVkVBT2h3VXBJX1VNOA%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fjupyter.org%2F&event=video_description) How to think like a computer scientist [http://www.openbookproject.net/thinkc...](https://www.youtube.com/redirect?redir_token=QUFFLUhqblFYT1hVUk9aWjY0dXg4VXpKa05ESzZrUkRYUXxBQ3Jtc0tsNE54RTcwWTZxVnZpenhhanlCOXRadWo2Qzg5bzAyM3o1RzNKMEFoS2F2SUdUeVRzNElLTzMzcERETTRjRURyZ054QjhJZVpFNFR6Z1JzUmpYUnFuU0RxcGlsTk9ocVZXelU2VFFPTXNlSWtOb3hsRQ%3D%3D&v=eTxyviU0Ddo&q=http%3A%2F%2Fwww.openbookproject.net%2Fthinkcs%2Fpython%2Fenglish3e%2F&event=video_description) WRITE A BLOG - [https://onextrapixel.com/start-jekyll...](https://www.youtube.com/redirect?redir_token=QUFFLUhqa0FsbFNWbzhCVEtSTWpLS1dRakwxcUJMcEpqZ3xBQ3Jtc0trZXpNSjN0b3dVaDMzdmhoTzNvczdKLV9lcUUzQ1JKaXNIWjZaRWpnZlJvbGdsbjExX3I4NGxUd2RKX3N6NThHM29rQkhsd0duZ1V4ck83Y2prT0c2Nmduc3NCakJQV2plT1Y3TXJZb0ZZNHVaalNPdw%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fonextrapixel.com%2Fstart-jekyll-blog-github-pages-free%2F&event=video_description) SLACK GROUPS: [https://kagglenoobs.herokuapp.com/](https://www.youtube.com/redirect?redir_token=QUFFLUhqbDNUbXpKdEMzLUJoVVBFRDRnU1RTUzFxWi14UXxBQ3Jtc0tsOTdLZG1LcXFLV0J2NVFVMnJmMTNTRTl2VF9MclBTdk5jV3VfODR2Wk5xdXMteG11ZF9MR1pZYTM0VGR5Skg1czcxVW9uaVdrcEFJVlJKVUNUSV9DYldvQVg5cmlBeXZ3WEZHRDV5ZlB1ZldqQ096Yw%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fkagglenoobs.herokuapp.com%2F&event=video_description) [https://datadiscourse.herokuapp.com/](https://www.youtube.com/redirect?redir_token=QUFFLUhqbXItOU44WWdyVUNQS0VVWU45akdQNEtUUUhIQXxBQ3Jtc0ttTDRfMXNYcmlRQ1VlU1pqSHdGTTFCbXdFWFhqaXhUaHdSSmFvOTNqQ3J4cFVZTmhoMjRjM0N1bEtheGNvTVdYY0x1YTFPTlBmM3QwZS0wSFRDRDl6RTlhLW5XdTNEaGNyUzlLYUxlM1FUV3RoTm93dw%3D%3D&v=eTxyviU0Ddo&q=https%3A%2F%2Fdatadiscourse.herokuapp.com%2F&event=video_description)