Course Links Reference Guide

Bonus Material

Dave Valentine

Contents

Section 1 -Bonus course - Machine Learning in Python and Jupyter for Beginners / Introduction and Anaconda Installation

Lecture 40 - Introduction and Anaconda Installation

- Anaconda Download (Scroll down). Any Python 3.x version will work)
  - https://www.anaconda.com/products/individual

- Data Set
  - http://www.tbdatascientist.com/live1.html

- Python 3.x Cheat Sheet
  - http://www.tbdatascientist.com/live1.html

Lecture 42 - Introduction and Setup

- Kaggle - Titanic: Machine Learning from Disaster
  - https://www.kaggle.com/c/titanic

- Anaconda Download (Scroll down). Any Python 3.x version will work)
  - https://www.anaconda.com/products/individual

- Python.org
  - https://www.python.org/

- Python eats away at R: Top Software for Analytics, Data Science, Machine Learning in 2018: Trends and Analysis
  - https://www.kdnuggets.com/2018/05/poll-tools-analytics-data-science-machine-learning-results.html

- CONDA (lets you switch easily between PY versions) [Don't confuse this with ANACONDA]
  - https://docs.conda.io/en/latest/

Section 2 -Bonus course - Machine Learning in Python and Jupyter for Beginners / Crash course in Python

Lecture #43 - Crash course in Python - Beginning concepts

- Python 3.x Cheat Sheet
  - http://www.tbdatascientist.com/live1.html

Lecture #46 - Crash course in Python - Functions, Scope, Dictionaries and more!

- Think Python 2nd Edition by Allen B. Downey
  - https://greenteapress.com/wp/think-python-2e/

Section 3 - Bonus course - Machine Learning in Python and Jupyter for Beginners / Hands on Running Python

Lecture #47 - Hands on Running Python

- Markdown for Jupyter notebooks cheatsheet
  - https://medium.com/ibm-data-science-experience/markdown-for-jupyter-notebooks-cheatsheet-386c05aeebed

- Mastering Markdown Guide
  - https://guides.github.com/features/mastering-markdown/

Section 4 - Bonus course - Machine Learning in Python and Jupyter for Beginners / Foundations of Machine Learning and Data Science

Lecture #48 - Foundations of Machine Learning and Data Science - Definitions and concepts.

- Machine Learning Isn't Data Science / by Nwokedi C. Idika / Oct 31, 2015
  - https://medium.com/@nwokedi/machine-learning-isn-t-data-science-67cc66867dbc#.tvrvg9re7

- The Data Science Venn Diagram by Drew Conway
  - http://drewconway.com/zia/2013/3/26/the-data-science-venn-diagram

- Battle of the Data Science Venn Diagrams
  - https://www.kdnuggets.com/2016/10/battle-data-science-venn-diagrams.html

- Regression Analysis Tutorial and Examples
  - https://blog.minitab.com/blog/adventures-in-statistics-2/regression-analysis-tutorial-and-examples

- Machine learning Definition from Wikipedia, the free encyclopedia
  - https://en.wikipedia.org/w/index.php?title=Machine_learning&oldid=741484832

Lecture #50 - Foundations of Machine Learning and Data Science - Algorithms, concepts and more

- Generalization Error and Overfitting / Sebastian Raschka
  - https://www.slideshare.net/SebastianRaschka/nextgen-talk-022015/31-Generalization_Error_and_OverttingHow_well

- Commonly used Machine Learning Algorithms (with Python and R Codes)
  - https://www.analyticsvidhya.com/blog/2017/09/common-machine-learning-algorithms/

Section 5 -Bonus course - Machine Learning in Python and Jupyter for Beginners - Introducing the essential modules for Machine Learning

Lecture #51 - Introducing the essential modules for Machine Learning, and NumPy Basics

- NumPy / The fundamental package for scientific computing with Python.
  - https://numpy.org/

Lecture #52 - Pandas and Matplotlib

- PANDAS – the Python Data Analysis Library
  - https://pandas.pydata.org/

- Matplotlib – plotting library which produces publication quality figures in a variety of formats
  - https://matplotlib.org/

Lecture #53 - Analysis using Pandas, plotting in Matplotlib, intro to SciPy and Scikit-learn

- Matplotlib Manual
  - http://matplotlib.org/Matplotlib.pdf

- matplotlib - 2D and 3D plotting in Python (notebook)
  - https://nbviewer.jupyter.org/github/jrjohansson/scientific-python-lectures/blob/master/Lecture-4-Matplotlib.ipynb

- SciPy.org - open-source Python library used for scientific computing and technical computing.
  - https://www.scipy.org/

- scikit-learn - Machine Learning in Python
  - https://scikit-learn.org/

Section 7 -Bonus course - Machine Learning in Python and Jupyter for Beginners – Conclusions

Lecture #60 - Conclusions - for our Titanic Example, important concepts and where to go next!

- Titanic: Machine Learning from Disaster – Kaggle Tutorials
  - https://www.kaggle.com/c/titanic#tutorials

- Titanic: Machine Learning from Disaster – Kaggle Discussion
  - https://www.kaggle.com/c/titanic/discussion/5105#29652

- How I scored in the top 9% of Kaggle's Titanic Machine Learning Challenge / by Peter Begle
  - https://medium.com/i-like-big-data-and-i-cannot-lie/how-i-scored-in-the-top-9-of-kaggles-titanic-machine-learning-challenge-243b5f45c8e9

- Titanic - Data Visualization & ML – Notebook by Florence Hervé
  - https://www.kaggle.com/florenceherve/titanic-data-visualization-ml/notebook

- Titanic Introduction Notebook
  - https://www.kaggle.com/jbandoro/titantic-introduction/notebook

- Exploratory Data Analysis Notebook with Titanic dataset by Muhammad Jamil Moughal
  - https://github.com/mjamilmoughal/DataSciencePractices/blob/master/Exploratory%20Data%20Analysis%20with%20Titanic%20Dataset.ipynb

- Machine Learning on the Titanic Dataset Notebook by Peter Begle
  - https://github.com/pbegle/Kaggle-Competitions/blob/master/Titanic/kaggle_titanic_challenge.ipynb

- Who Survived the Titanic? Notebook by William Lucia
  - https://turi.com/learn/gallery/notebooks/who_survived_the_titanic.html

- Kaggle Titanic Notebook by Andrew Conti
  - https://github.com/agconti/kaggle-titanic

- My website if you want to get in touch!
  - http://www.tbdatascientist.com