



# MINDCRAFT

CRAFTING INTELLIGENT MINDS

Disclaimer: This content is generated by AI.

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Reference:

<https://www.statology.org/simple-linear-regression/>

<https://towardsdatascience.com/simple-linear-regression-explained-in-python-with-statsmodels-and-sci-kit-learn-66103165595f>

[https://en.wikipedia.org/wiki/Simple\\_linear\\_regression](https://en.wikipedia.org/wiki/Simple_linear_regression)

### Video Links:

<https://www.youtube.com/watch?v=owl7zxQcNY0>

<https://www.youtube.com/watch?v=WkVvZreJtmU>

<https://www.youtube.com/watch?v=hxrM8LJ-27w>

<https://www.youtube.com/watch?v=FDIR60avpaY>

<https://www.youtube.com/watch?v=GhrxgbQnEEU>

<https://www.youtube.com/watch?v=9wX1a1J4WOI>

<https://www.youtube.com/watch?v=ZkjP5RJLQF4>

<https://www.youtube.com/watch?v=KsVBBJRb9TE>

[https://www.youtube.com/watch?v=\\_HVmYJH-pFg](https://www.youtube.com/watch?v=_HVmYJH-pFg)

[https://www.youtube.com/watch?v=ogLNstRx\\_QQ](https://www.youtube.com/watch?v=ogLNstRx_QQ)

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<https://www.youtube.com/watch?v=m-k84cCves8>  
[https://www.youtube.com/watch?v=EqP\\_DupX3-c](https://www.youtube.com/watch?v=EqP_DupX3-c)  
<https://www.youtube.com/watch?v=ZGlzh57o3T8>  
<https://www.youtube.com/watch?v=i-JzjqLoxUQ>  
<https://www.youtube.com/watch?v=EkAQAi3a4js&pp;=ygUMI3Jlc2dyZXNzaW9u>  
[https://www.youtube.com/watch?v=wPJ1\\_Z8b0wk&pp;=ygUXI3Byb2dnZXNpb25vcnJlZ3Jlc3Npb24%3D](https://www.youtube.com/watch?v=wPJ1_Z8b0wk&pp;=ygUXI3Byb2dnZXNpb25vcnJlZ3Jlc3Npb24%3D)

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## Reference:

[https://scikit-learn.org/stable/modules/linear\\_model.html#polynomial-regression](https://scikit-learn.org/stable/modules/linear_model.html#polynomial-regression)  
<https://www.geeksforgeeks.org/python-implementation-of-polynomial-regression/>  
<https://towardsdatascience.com/polynomial-regression-bbe8b9d97491>

## Video Links:

<https://www.youtube.com/watch?v=Qptl-vDle8Y&pp;=ygUVcG9seW5vbWlhbCBYZWdyZXNzaW9u>  
<https://www.youtube.com/watch?v=Qnt2vBRW8lo>  
<https://www.youtube.com/watch?v=5wrPSB7rXks>  
[https://www.youtube.com/watch?v=2YzF9D\\_r16o](https://www.youtube.com/watch?v=2YzF9D_r16o)  
<https://www.youtube.com/watch?v=UedwCvFGlvU>  
<https://www.youtube.com/watch?v=nqNdBIA-j4w&pp;=ygUdl3BvbHlub21pYWxyZWdyZXNzaW9uYW5hbHlzaXM%3D>

<https://www.youtube.com/watch?v=m-vKo93Hcp8>

<https://www.youtube.com/watch?v=DcHvXTtsajI>

<https://www.youtube.com/watch?v=H8kocPOT5v0>

<https://www.youtube.com/watch?v=UzIOKOr-s-w>

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## Reference:

[https://scikit-learn.org/stable/modules/linear\\_model.html#ridge-regression](https://scikit-learn.org/stable/modules/linear_model.html#ridge-regression)

<https://www.statlearning.com/>

[https://en.wikipedia.org/wiki/Ridge\\_regression](https://en.wikipedia.org/wiki/Ridge_regression)

## Video Links:

<https://www.youtube.com/watch?v=Q81RR3yKn30>

<https://www.youtube.com/watch?v=OEU22e20tWw>

<https://www.youtube.com/watch?v=9LNpiiKCQUo>

<https://www.youtube.com/watch?v=6WldQjzAxUM>

<https://www.youtube.com/watch?v=cR9vXkS4ulU>

<https://www.youtube.com/watch?v=5asL5Eq2x0A>

<https://www.youtube.com/watch?v=LCBKjKRnqSU>

<https://www.youtube.com/watch?v=mpuKSovz9xM>

<https://www.youtube.com/watch?v=c3SkmBZ0HZw>

<https://www.youtube.com/watch?v=JXUZQjgjs9g>

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#### Reference:

[https://scikit-learn.org/stable/modules/linear\\_model.html#lasso](https://scikit-learn.org/stable/modules/linear_model.html#lasso)

[https://en.wikipedia.org/wiki/Lasso\\_\(statistics\)](https://en.wikipedia.org/wiki/Lasso_(statistics))

<https://www.statlearning.com/>

#### Video Links:

<https://www.youtube.com/watch?v=NGf0voTMIcs>

<https://www.youtube.com/watch?v=jbwSCwoT51M>

<https://www.youtube.com/watch?v=9LNpiiKCQUo>

<https://www.youtube.com/watch?v=bPFjfZWWQO0>

<https://www.youtube.com/watch?v=39OoHo1TGiQ>

<https://www.youtube.com/watch?v=gmHzz4244ss>

<https://www.youtube.com/watch?v=LCBKjKRnqSU>

<https://www.youtube.com/watch?v=LmpBt0tenJE>

[https://www.youtube.com/watch?v=cVFYhICCI\\_8](https://www.youtube.com/watch?v=cVFYhICCI_8)

<https://www.youtube.com/watch?v=9cwoCR6BSIQ>

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Reference:

[https://scikit-learn.org/stable/modules/linear\\_model.html#ridge-regression](https://scikit-learn.org/stable/modules/linear_model.html#ridge-regression)

<https://towardsdatascience.com/l1-and-l2-regularization-methods-ce25e76b895c>

<https://www.analyticsvidhya.com/blog/2021/05/ridge-and-lasso-regression-techniques/>

#### Video Links:

[https://www.youtube.com/watch?v=bOIPwdWso\\_0](https://www.youtube.com/watch?v=bOIPwdWso_0)

<https://www.youtube.com/watch?v=3ov8cUCfq0>

[https://www.youtube.com/watch?v=r\\_c554LAFVw](https://www.youtube.com/watch?v=r_c554LAFVw)

[https://www.youtube.com/watch?v=uisWo\\_LXMwY](https://www.youtube.com/watch?v=uisWo_LXMwY)

[https://www.youtube.com/watch?v=OH4\\_Xsk8nfc](https://www.youtube.com/watch?v=OH4_Xsk8nfc)

[https://www.youtube.com/watch?v=u1CP0pE3b\\_A](https://www.youtube.com/watch?v=u1CP0pE3b_A)

<https://www.youtube.com/watch?v=Hklgpww5Emg>

<https://www.youtube.com/watch?v=rQVODj9YDp0&pp;=ygUHI2wxdnNsMg%3D%3D>

[https://www.youtube.com/watch?v=Va4K-wYh\\_p8](https://www.youtube.com/watch?v=Va4K-wYh_p8)

<https://www.youtube.com/watch?v=EehRcPo1M-Q>