Machine Learning for Mechanical Engineers

Elective course for TY BTech students at the College of Engineering Pune

The course must be a trendsetter so that it can be replicated elsewhere. Even IITB mech does not have it. IITB Comp Sc has it but looks more mathematical/algorithmic than application oriented

**Course page**: yogeshhk.blogspot.in/2018/01/machine-learning-for-mechanical.html

# To Dos

* Need to get official invitation letter form HOD. Confirmation on timing. Logistic arrangement of the lab. Key carrying person?
* Collect list of registered students to make attendance sheet/xls
* Make mailing list by IT dept? or my own google list?

# Projects

* Faulty Steel Plates: Steel plate faults classified into seven types <https://www.kaggle.com/uciml/faulty-steel-plates>
* Condition Based Maintenance of Naval Propulsion Plants Data Set <http://archive.ics.uci.edu/ml/machine-learning-databases/00316/>
* Automobile Data Set <https://archive.ics.uci.edu/ml/machine-learning-databases/autos/>
* Annealing Data Set <https://archive.ics.uci.edu/ml/machine-learning-databases/annealing/>
* Car Evaluation Data Set <http://archive.ics.uci.edu/ml/machine-learning-databases/car/>

# References

* IITB Comp Science course commencing now <https://www.cse.iitb.ac.in/~pjyothi/cs419/index.html>
* <http://moreisdifferent.com/2017/11/21/resources-for-learning-machine-learning>
* Data Analytics with Python (ML as well) <https://www.youtube.com/watch?v=xgsZ4wV_qYU&list=PLVBorYCcu-xWBPu3o73uj2FJ_7dp6g-pr>
* Good applets <https://docs.google.com/spreadsheets/d/1JUQ1YDOjok_sHJcnX83Iv2wryIZJEtdulB9piI0zLf0/edit?hl=en_US&hl=en_US#gid=0>
* Gallery of Notebooks <https://github.com/jupyter/jupyter/wiki/A-gallery-of-interesting-Jupyter-Notebooks>
* Lots of ipynbs: <https://github.com/ipeirotis/dealing_with_data>