Semisupervised anomaly detection for DC

What we managed to do during the hackathon:

- bug fixes to get access to eos from jupyter
- putting pieces of code together, created two jupyter notebooks:
    1, data preprocessing+training+hyperparameter search
    2, evaluation of models based on multiple metrics
- optimizing on 'customized' validation set
- implemented grid search for activation functions and regularizers
- hyperopt for optimizing other parameters of the autoencoder
- added earlystopping feature
- generated and evaluated few models (stopped by cmg-machine failure)

TODO:

- just run it again on functioning machine, evaluate models and save the best one
- write a paper for CHEP
- another technical student coming after me should start moving it into production