**Final Modules**

**Visualize**

* Nice links
* Having a few sentences about what is the data that you are reading would help.
* Please add a table of contents
* Little description on what each visualization means/when to use them helps. You can also link further reading material if there is any recommended one.
* What are the answers to the questions in the activity?
* You can link this training: <https://matlabacademy.mathworks.com/details/matlab-for-data-processing-and-visualization/mlvi>

**Imbalanced**

* Nice use of table of contents
* Nice visualizations and descriptions. Curve Fitter App could have been used, but not a major concern.
* Did SMOTE results compare well with Python Equivalent, was SMOTE easy to use?
* Maybe you can add this doc: <https://www.mathworks.com/help/stats/classification-with-imbalanced-data.html>

**Support\_Vector**

* Nice use of Table of Contents
* You can mention Regression Learner App or link this doc: <https://www.mathworks.com/help/stats/support-vector-machine-regression.html>
* I’d also suggest linking doc of fitrsvm: <https://www.mathworks.com/help/stats/fitrsvm.html>
* You can link this training: <https://matlabacademy.mathworks.com/details/machine-learning-with-matlab/mlml>

**Statistics Module**

* Good use of table of contents
* Add labels to the figures (line 6-18)
* MATLAB indexing starts with 1, comments in line 26-30 are confusing
* Do we know the solution to the activity?

**Scale**

* Good description
* You used element by element division in minmax scaler later, but not at the beginning. You can make it consistent
* What are NaN’s in the result? Is it the same in Python version?
* You can display outputs of histograms by removing semicolons

**Neural Network Regressor**

* Good use of table of contents
* You can use import tool to bring data into MATLAB interactively.
* You can include the documentation for that: <https://www.mathworks.com/help/matlab/ref/importtool.html>
* In training options, it is good to mention execution environment as some people may have an NVIDIA GPU that they can use. You can also link documentation: <https://www.mathworks.com/help/deeplearning/ref/trainingoptions.html>
* You can link Deep Learning Onramp and Deep Learning with MATLAB training courses: <https://matlabacademy.mathworks.com/#ai>

**Linear Regression**

* Good use of table of contents
* Great use of Curve Fitter 😊
* Great use of doc for scaling up computations

**kNN\_Regression**

* Since you are using multiple files depending on each other, you might want to consider using Projects: <https://www.mathworks.com/help/matlab/projects.html>
* You can also programmatically download the file, unzip it and add to path.

**GatherData**

* Add Table of Contents
* You can link this training: <https://matlabacademy.mathworks.com/details/matlab-for-data-processing-and-visualization/mlvi>
* You can use import tool to bring data into MATLAB interactively.
* You can include the documentation for that: <https://www.mathworks.com/help/matlab/ref/importtool.html>

**Feature Engineering**

* Good use of table of contents and documentation
* Good use of MathWorks discovery page link
* You can add the doc link of mapminmax

**Cleanse**

* You can add table of contents
* You can also mention data cleaning tools in Import Tool to clean data interactively and you can mention Live Tasks to clean data in Live Scripts interactively: <https://www.mathworks.com/help/matlab/matlab_prog/add-live-editor-tasks-to-a-live-script.html>
* In Filters, you can link logical indexing article: <https://www.mathworks.com/company/newsletters/articles/matrix-indexing-in-matlab.html>
* You can also mention pivot tables in MATLAB, that’s a new feature: <https://www.mathworks.com/help/matlab/ref/pivot.html?searchHighlight=pivot%20table&s_tid=srchtitle_pivot%20table_1>
* It is also worth linking MATLAB Fundamentals for Data Preprocessing: <https://matlabacademy.mathworks.com/details/matlab-fundamentals/mlbe>

**Classification Overview**

* Good use of Table of Contents
* Address code analyzer warnings
* You can show classification learner app or link it here
* There are many functions, it might be worth to add a comment to say which one is used where for what.
* You can also add machine learning Onramp and Machine Learning with MATLAB tutorials here: <https://matlabacademy.mathworks.com/details/machine-learning-onramp/machinelearning>

<https://matlabacademy.mathworks.com/details/machine-learning-with-matlab/mlml>

**KNN\_Classifier\_DigitsData**

**KNearestneighbor**

* Make sure to spell MATLAB in all capital
* Good use of table of contents
* What is the purpose of not using fitcknn?
* Nice that text explains the advantages and disadvantages of knn

**SplitData**

**Split\_Data**

* Text is talking about SciKitLearn, make sure to adapt it to MATLAB.

**Final Case Studies**

**Concrete Strength**

**Part 1**

* Good direction to use Add-Ons
* Address Code Analyzer suggestions (orange marks on the side)
* Pair plot doesn’t have axis labels, add labels
* For plotting, you can also link plot gallery link: <https://www.mathworks.com/products/matlab/plot-gallery.html>
* You can include this training: <https://matlabacademy.mathworks.com/details/matlab-for-data-processing-and-visualization/mlvi>

Part 2:

* Add labels to the figures after line 196
* Address Code Analyzer warnings

**Additive Manufacturing**

* Great use of Live Tasks!
* Maybe mention interactive way of training machine learning models?

**Bit Classification**

* Nice that you gave the specs of the computer you used for training, sets the expectations.
* Nice that you mentioned Experiment Manager!
* Address Code Analyzer suggestions

**Cybersecurity**

* You can mention interactive ways of training models or link the resources

**Draw Classification**

* You can make different steps heading too and include them in table of contents
* Awesome that you included documentation links

**Lithium-Ion Batteries**

* Good work, nice that references are included

**Polymer Melt Flow Rate**

* You can link describe function’s documentation
* Great description of Regression Learner App use

**Soil Classification**

* Great use of deep network designer

**Sonar detection**

* You can clean up the figures a little, title sizes are large, some outputs are on top of one another in the confusion matrix
* Nice use of links

**Steel Plate Defects**

* Address Code Analyzer warnings

**Notes:**

**Spencer, Sean, Jacob will be here, one more person will be hired potentially, Dr.Hedengren**

**Jacob – new team lead**