* Obtain the C-MAPSS turbofan engine dataset described in the paper. This dataset contains run-to-failure sensor measurement data from simulated turbofan engines under different operating conditions.
  + See [Data](file:///C:\Users\elija\Desktop\BriteGroup\Assigned\Dynamic%20predictive%20maintenance%20for%20multiple%20components%20using%20data-driven%20probabilistic%20RUL%20prognostics\Data)
* Preprocess the sensor data:
  + Normalize the sensor measurements using min-max normalization with respect to the operating condition, as described in equation (1)
  + Split the dataset into training and test sets following the proportions used in the paper.
* Implement the Convolutional Neural Network (CNN) architecture described in Section 2.2, using the hyperparameters specified in Table 2. Train the CNN on the preprocessed training data.
  + See [2.2](file:///C:\Users\elija\Desktop\BriteGroup\Assigned\Dynamic%20predictive%20maintenance%20for%20multiple%20components%20using%20data-driven%20probabilistic%20RUL%20prognostics\Detailed%20Summary%20by%20Section.docx)
* Implement Monte Carlo dropout, as described in Section 2.3, to obtain probabilistic Remaining Useful Life (RUL) estimates from the trained CNN. Use the number of forward passes M=1000.
  + See [2.3](file:///C:\Users\elija\Desktop\BriteGroup\Assigned\Dynamic%20predictive%20maintenance%20for%20multiple%20components%20using%20data-driven%20probabilistic%20RUL%20prognostics\Detailed%20Summary%20by%20Section.docx)
* Evaluate the probabilistic RUL prognostics on the test set using the metrics described in the paper:
  + Root Mean Square Error (RMSE) of the mean RUL predictions
  + α-coverage and α-mean width for different α values
  + Reliability diagrams
  + Compare the evaluation results to those reported in [Section 3](file:///C:\Users\elija\Desktop\BriteGroup\Assigned\Dynamic%20predictive%20maintenance%20for%20multiple%20components%20using%20data-driven%20probabilistic%20RUL%20prognostics\Detailed%20Summary%20by%20Section.docx) of the paper.