Data Boot Camp Grading Rubric

Module 21 - Deep Learning Homework - Charity Funding Predictor

Instructions:

Evaluate the homework against the outlined criteria in the below rubric, assigning a rating to each criterion. Add points earned across all criteria and convert the total points to a letter grade, assigning a “+” or “-” letter grade designation at your discretion.

A (+/-)	90+	C (+/-)	70-79	F (+/-)	<60
B (+/-)	80-89	D (+/-)	60-69		

Notes:

The deployed assignment utilizes the **Pandas**, **sklearn**, and **TensorFlow** libraries to train deep neural network models on a set of data and utilizes those models to make predictions. The source code should also be deployed to **GitHub** or **GitLab**.

Rubric for Charity Funding Predictor :

	Proficiency	Approaching Proficiency	Developing Proficiency	Emerging	Incomplete

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Data Preprocessing	**28 to 30 pts** The deliverable does the following: ✓The EIN and NAME columns have been dropped. ✓Columns with more than 10 unique values have been grouped together ✓The categorical variables have been encoded using `get_dummies` AND has these: ✓Code is written to split the preprocessed data into features and target arrays ✓Code is written to split the preprocessed data into training and testing datasets ✓Code is written to standardize the numerical values using the `StandardScaler`	**25 to 27 pts** The deliverable meets this requirement: ✓The preprocessed data is split into features and target arrays. AND has these: ✓Code is written to split the preprocessed data into training and testing datasets ✓Code is written to standardize the numerical values using the `StandardScaler`	**22 to 24 pts** The deliverable meets this requirement: ✓The preprocessed data is split into training and testing datasets AND has this: ✓Code is written to standardize the numerical values using the `StandardScaler`	**0 to 21 pts** The deliverable fulfills meets this requirement: ✓The numerical values have been standardized using the `StandardScaler`	No submission was received -OR- Submission was empty or blank -OR- Submission contains evidence of academic dishonesty
Compile, Train, and Evaluate the Model	**19 to 20 pts** The deliverable does the following: ✓The number of layers, number of neurons per layer, and activation function are defined ✓An output layer with an activation function is created AND does these: ✓Code is written to create an output of the structure of the model ✓Code is written to create an output of the model's loss and accuracy ✓Code is written to save the	**17 to 18 pts** The deliverable meets this requirement: ✓There is an output of the structure of the model AND does these: ✓Code is written to create an output of the model's loss and accuracy ✓Code is written to save the results to an HDF5 file, but there is an error	**15 to 16 pts** The deliverable meets this requirement: ✓There is an output of the model's loss and accuracy AND has this: ✓Code is written to save the results to an HDF5 file, but there is an error	**0 to 14 pts** The deliverable meets this requirement: ✓Code is written to save the results to an HDF5 file, but there is an error	

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	results to an HDF5 file, but there is an error				
Model Optimization	**18 to 20 pts** Student produces model that demonstrates predictive accuracy over 75% -OR- The student's solution contains working code that attempts to increase model performance at least THREE times using the following steps: ✓Noisy variables are removed from features ✓Additional neurons are added to the hidden layers ✓Additional hidden layers are added ✓The activation function of hidden layers or output layers are changed for optimization -AND- ✓The results are saved to an HDF5 file	**15 to 17 pts** The student's solution contains working code that attempts to increase model performance at least TWO times using the following steps: ✓Leaves out noisy variables from features ✓Additional neurons are added to the hidden layers ✓Adds additional hidden layers to the model ✓Changes the activation function of hidden layers or output layers -AND- ✓The results are saved to an HDF5 file	**13 to 14 pts** The student's solution contains working code that attempts to increase model performance at least ONE time using the following steps: ✓Leaves out noisy variables from features ✓Additional neurons are added to the hidden layers ✓Adds additional hidden layers to the model ✓Changes the activation function of hidden layers or output layers -AND- ✓The results are saved to an HDF5 file	**0 to 12 pts** Student attempts to produce working code that produces the following steps: ✓Leaves out noisy variables from features ✓Additional neurons are added to the hidden layers ✓Adds additional hidden layers to the model ✓Changes the activation function of hidden layers or output layer -AND- ✓The results are saved to an HDF5 file	
Report: Structure, Organization, and Formatting	**5 to 6 pts** The written analysis has ALL of the following: ✓There is a title, and there are multiple sections ✓Each section has a heading and subheading ✓The images are formatted and	**4 to 5 pts** The written analysis has ALL of the following: ✓There is a title, and there are multiple sections ✓Each section has a heading and subheading ✓The images are formatted and	**3 to 4 pts** The written analysis has the following: ✓There is a title, and there are multiple sections. AND ONE of the following:	**0 to 2 pts** The written analysis has the following: ✓There is a title ✓There may be a subheading for a section ✓There are no headings for each section, but there are three sections	

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	displayed correctly	displayed correctly, with one or two minor errors	✓Each section may have a heading and subheading ✓The images are formatted and displayed correctly, with one or two minor errors		
Report: Analysis	**22 to 24 pts** ✓The purpose is well defined ✓ALL SIX questions are answered ✓The results are summarized, and there is a recommendation on using a different model to solve the classification problem, with a justification	**19 to 21 pts** ✓The purpose is well defined ✓FIVE of the SIX questions are answered ✓The results are summarized, and there is a recommendation on using a different model to solve the classification problem, but there is no justification	**17 to 18 pts** ✓The purpose is well defined ✓FOUR of the SIX questions are answered ✓The results are summarized, but there is no recommendation on using a different model to solve the classification problem	**0 to 16 pts** ✓The purpose is well defined ✓THREE of the SIX questions are answered ✓The results are summarized, but there is no recommendation on using a different model to solve the classification problem	