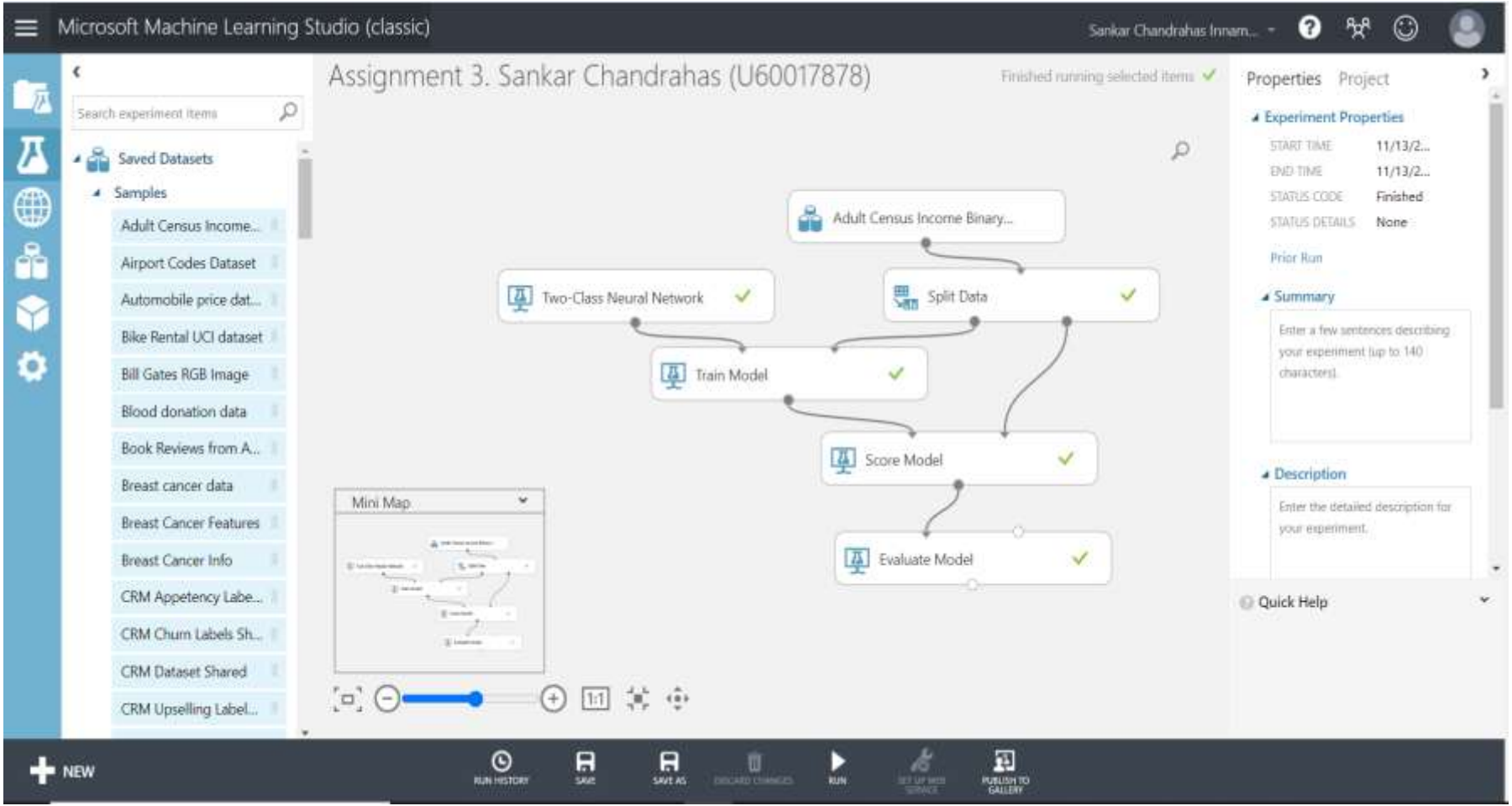
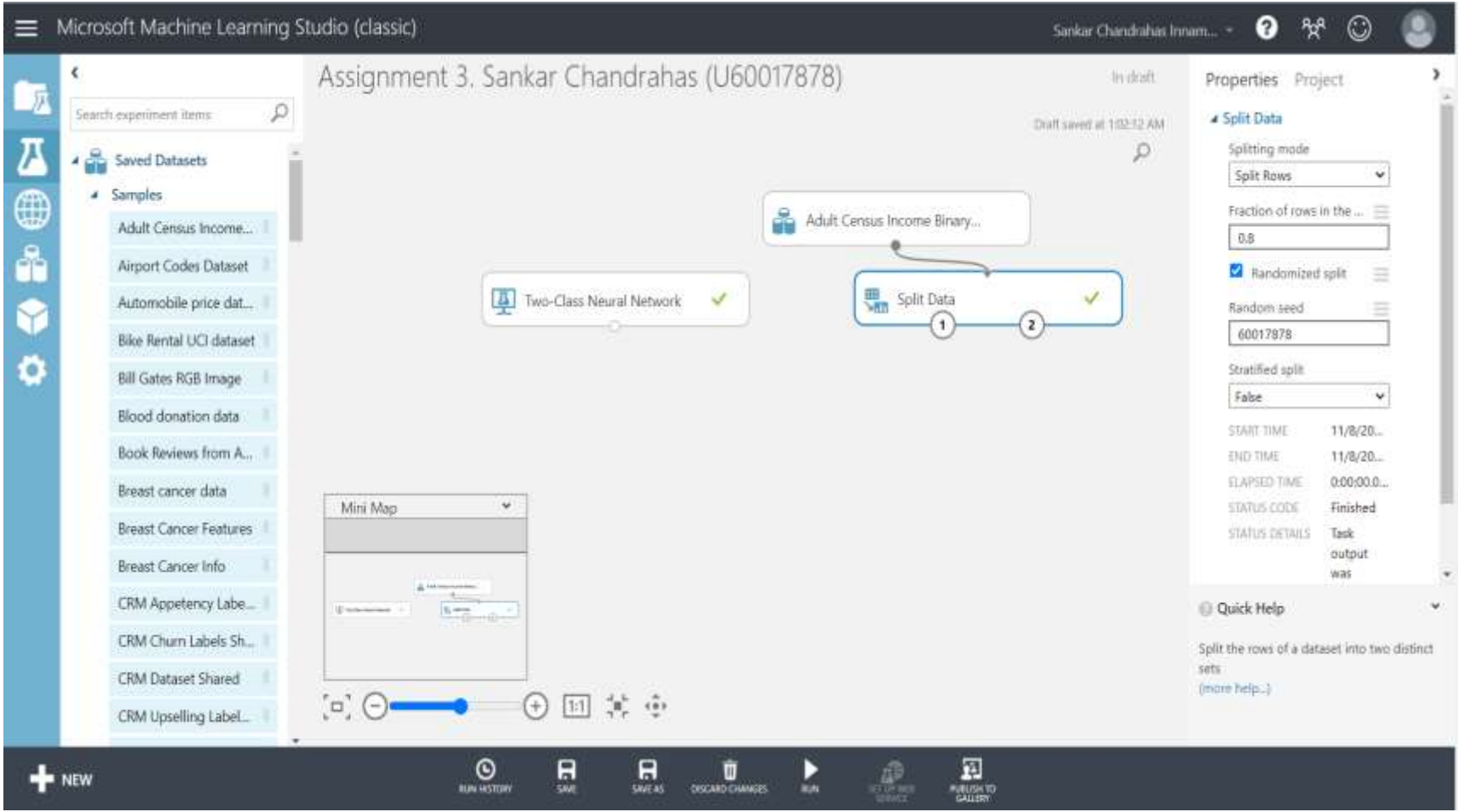
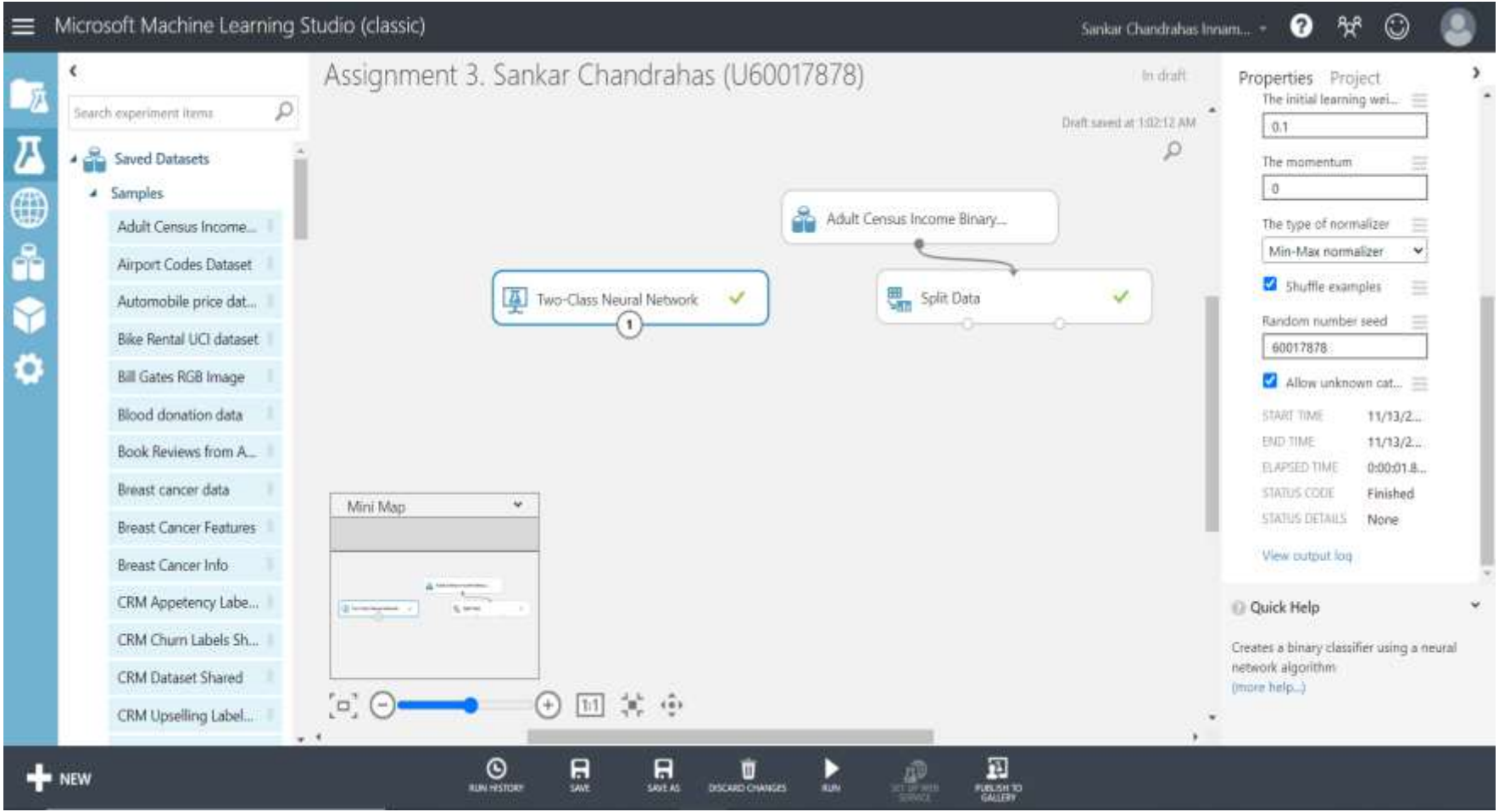
Screen 1: Full Model


Microsoft Machine Learning Studio (classic)
Sankar Chandrahas Innam...
Assignment 3. Sankar Chandrahas (U60017878)
Finished running selected items
Search experiment items
Saved Datasets
Samples
Adult Census Income...
Airport Codes Dataset
Automobile price dat...
Bike Rental UCI dataset
Bill Gates RGB Image
Blood donation data
Book Reviews from A...
Breast cancer data
Breast Cancer Features
Breast Cancer Info
CRM Appetency Labe...
CRM Churn Labels Sh...
CRM Dataset Shared
CRM Upselling Label...
Adult Census Income Binary...
Two-Class Neural Network
Split Data
Train Model
Score Model
Evaluate Model
Mini Map
1:1
Properties
Project
Experiment Properties
START TIME
11/13/2...
END TIME
11/13/2...
STATUS CODE
Finished
STATUS DETAILS
None
Prior Run
Summary
Enter a few sentences describing your experiment (up to 140 characters).
Description
Enter the detailed description for your experiment.
Quick Help
NEW
RUN HISTORY
SAVE
SAVE AS
RUN
PUBLISH TO GALLERY

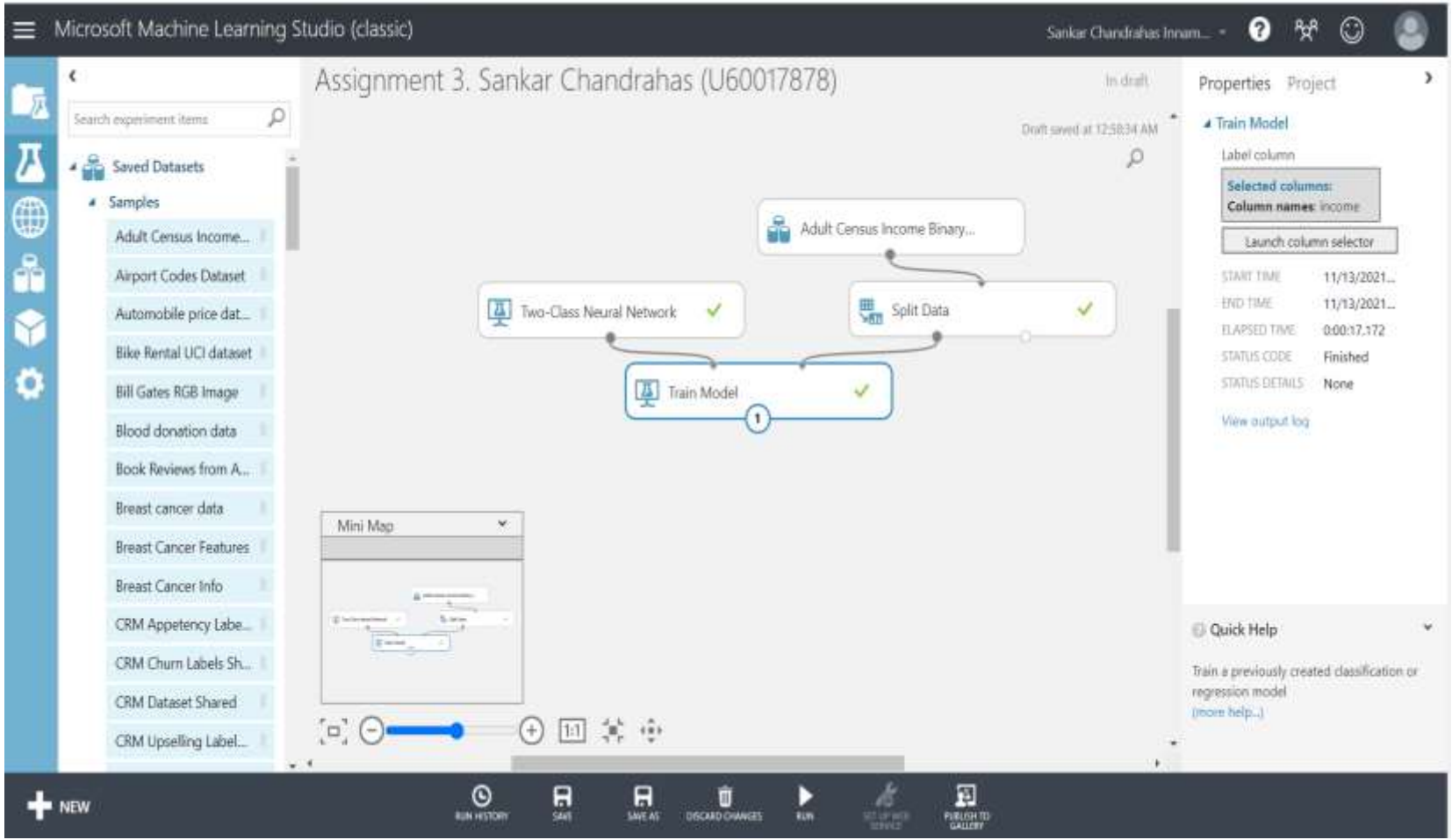
Screen 2: Split Data


Microsoft Machine Learning Studio (classic)
Sankar Chandrahas Innam...
Assignment 3. Sankar Chandrahas (U60017878)
In draft
Draft saved at 1:02:12 AM
Search experiment items
Saved Datasets
Samples
Adult Census Income...
Airport Codes Dataset
Automobile price dat...
Bike Rental UCI dataset
Bill Gates RGB Image
Blood donation data
Book Reviews from A...
Breast cancer data
Breast Cancer Features
Breast Cancer Info
CRM Appetency Labe...
CRM Churn Labels Sh...
CRM Dataset Shared
CRM Upselling Label...
Adult Census Income Binary...
Two-Class Neural Network
Split Data
1
2
Mini Map
Properties
Project
Split Data
Splitting mode
Split Rows
Fraction of rows in the ...
0.8
Randomized split
Random seed
60017878
Stratified split
False
START TIME
11/8/20...
END TIME
11/8/20...
ELAPSED TIME
0:00:00.0...
STATUS CODE
Finished
STATUS DETAILS
Task output was
Quick Help
Split the rows of a dataset into two distinct sets
(more help...)
NEW
RUN HISTORY
SAVE
SAVE AS
DISCARD CHANGES
RUN
SET UP WEB SERVICE
PUBLISH TO GALLERY

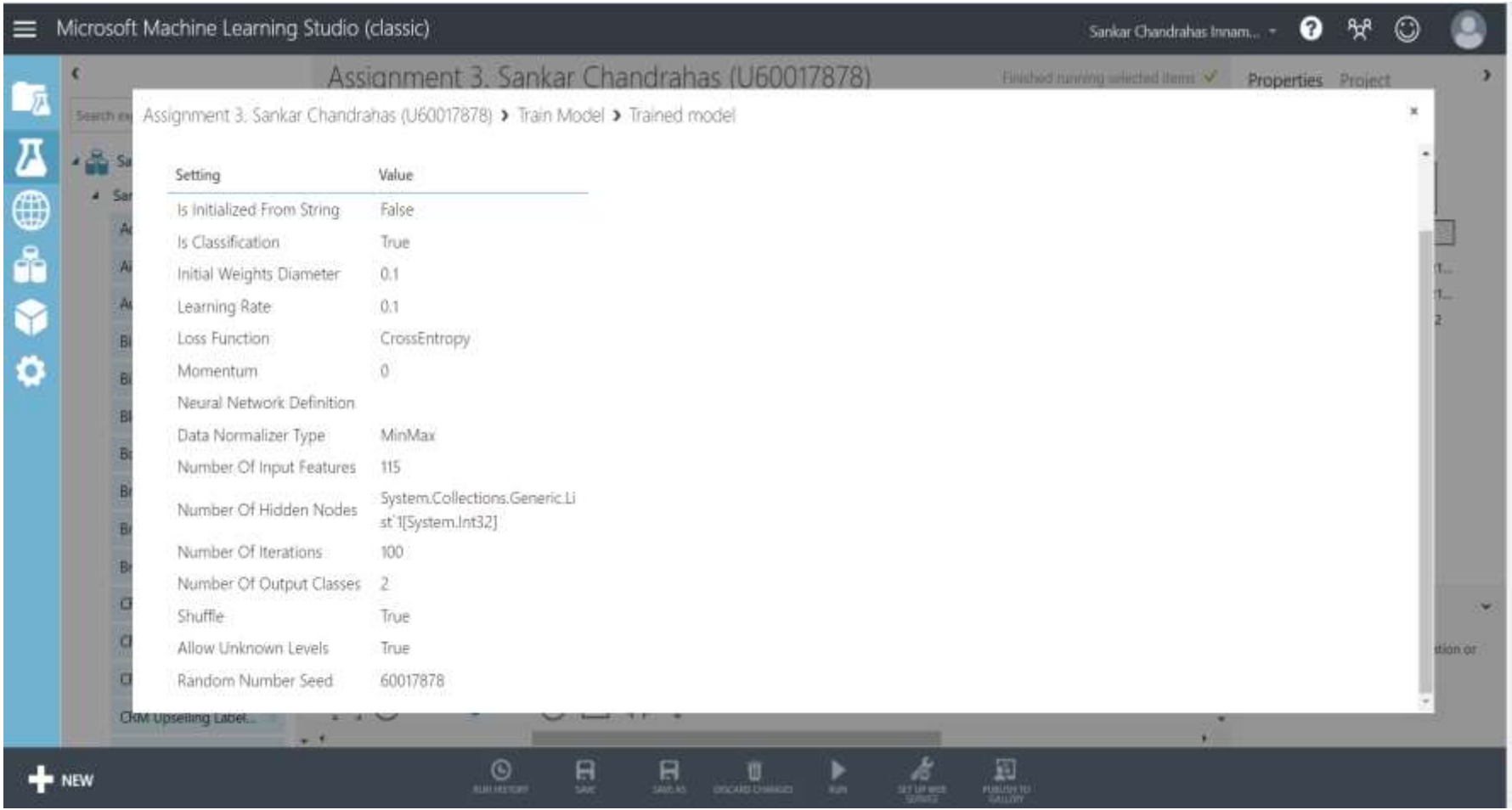
Screen 3: Algorithm


Microsoft Machine Learning Studio (classic)
Sankar Chandrahas Innam...
Assignment 3. Sankar Chandrahas (U60017878)
In draft
Draft saved at 1:02:12 AM
Search experiment items
Saved Datasets
Samples
Adult Census Income...
Airport Codes Dataset
Automobile price dat...
Bike Rental UCI dataset
Bill Gates RGB Image
Blood donation data
Book Reviews from A...
Breast cancer data
Breast Cancer Features
Breast Cancer Info
CRM Appetency Labe...
CRM Churn Labels Sh...
CRM Dataset Shared
CRM Upselling Label...
Adult Census Income Binary...
Two-Class Neural Network
Split Data
Mini Map
Properties
Project
The initial learning wei...
0.1
The momentum
0
The type of normalizer
Min-Max normalizer
Shuffle examples
Random number seed
60017878
Allow unknown cat...
START TIME
11/13/2...
END TIME
11/13/2...
ELAPSED TIME
0:00:01.8...
STATUS CODE
Finished
STATUS DETAILS
None
View output log
Quick Help
Creates a binary classifier using a neural network algorithm
(more help...)
NEW
RUN HISTORY
SAVE
SAVE AS
DISCARD CHANGES
RUN
SET UP WEB SERVICE
PUBLISH TO GALLERY

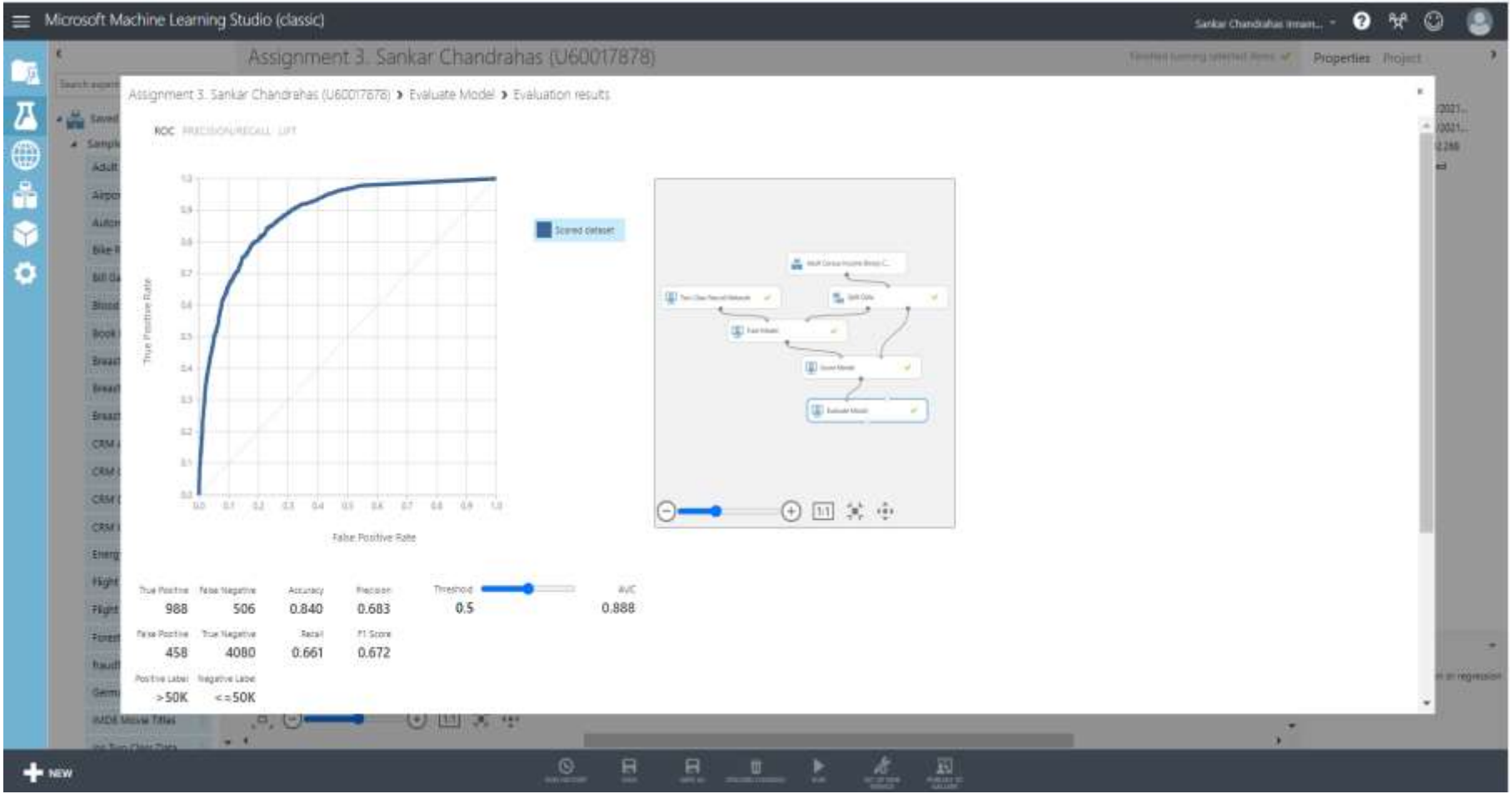
Screen 4: Trained model


Microsoft Machine Learning Studio (classic)
Sankar Chandrahas Innam...
Assignment 3. Sankar Chandrahas (U60017878)
In draft
Draft saved at 12:58:34 AM
Search experiment items
Saved Datasets
Samples
Adult Census Income...
Airport Codes Dataset
Automobile price dat...
Bike Rental UCI dataset
Bill Gates RGB Image
Blood donation data
Book Reviews from A...
Breast cancer data
Breast Cancer Features
Breast Cancer Info
CRM Appetency Labe...
CRM Churn Labels Sh...
CRM Dataset Shared
CRM Upselling Label...
Adult Census Income Binary...
Two-Class Neural Network
Split Data
Train Model
1
Mini Map
1:1
Properties
Project
Train Model
Label column
Selected columns:
Column names: Income
Launch column selector
START TIME 11/13/2021...
END TIME 11/13/2021...
ELAPSED TIME 0:00:17.172
STATUS CODE Finished
STATUS DETAILS None
View output log
Quick Help
Train a previously created classification or regression model
(more help...)
NEW
RUN HISTORY
SAVE
SAVE AS
DISCARD CHANGES
RUN
SET UP WEB SERVICE
PUBLISH TO GALLERY

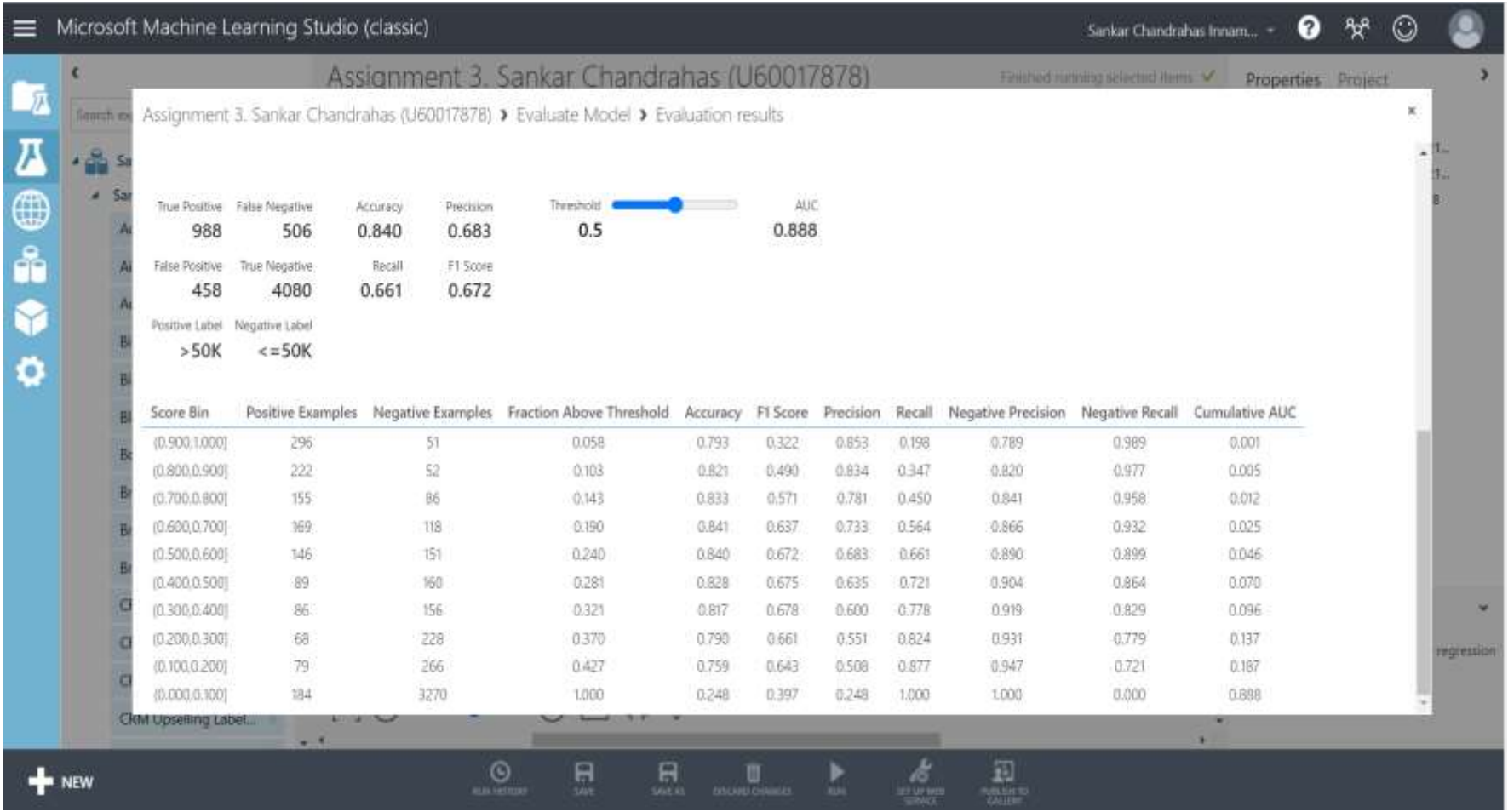
Screen 5: Visualization of Trained Model


Microsoft Machine Learning Studio (classic)
Sankar Chandrahas Innam...
Assignment 3. Sankar Chandrahas (U60017878)
Properties
Project
Assignment 3. Sankar Chandrahas (U60017878) › Train Model › Trained model
Setting
Value
Is Initialized From String
False
Is Classification
True
Initial Weights Diameter
0.1
Learning Rate
0.1
Loss Function
CrossEntropy
Momentum
0
Neural Network Definition
Data Normalizer Type
MinMax
Number Of Input Features
115
Number Of Hidden Nodes
System.Collections.Generic.List`1[System.Int32]
Number Of Iterations
100
Number Of Output Classes
2
Shuffle
True
Allow Unknown Levels
True
Random Number Seed
60017878
NEW

Screen 6: ROC Curve


Microsoft Machine Learning Studio (classic)
Assignment 3. Sankar Chandrahas (U60017878)
Properties
Project
Assignment 3. Sankar Chandrahas (U60017878) › Evaluate Model › Evaluation results
ROC
Scored dataset
True Positive Rate
False Positive Rate
True Positive
988
False Negative
506
Accuracy
0.840
Precision
0.683
Threshold
0.5
AUC
0.888
False Positive
458
True Negative
4080
Recall
0.661
F1 Score
0.672
Positive Label
>50K
Negative Label
<=50K
NEW

Screen 7: Confusion Matrix


Microsoft Machine Learning Studio (classic)
Sankar Chandrahas Innam...
Assignment 3. Sankar Chandrahas (U60017878)
Properties
Project
Assignment 3. Sankar Chandrahas (U60017878) › Evaluate Model › Evaluation results
True Positive 988
False Negative 506
Accuracy 0.840
Precision 0.683
Threshold 0.5
AUC 0.888
False Positive 458
True Negative 4080
Recall 0.661
F1 Score 0.672
Positive Label >50K
Negative Label <=50K
Score Bin | Positive Examples | Negative Examples | Fraction Above Threshold | Accuracy | F1 Score | Precision | Recall | Negative Precision | Negative Recall | Cumulative AUC
(0.900,1.000] | 296 | 51 | 0.058 | 0.793 | 0.322 | 0.853 | 0.198 | 0.789 | 0.989 | 0.001
(0.800,0.900] | 222 | 52 | 0.103 | 0.821 | 0.490 | 0.834 | 0.347 | 0.820 | 0.977 | 0.005
(0.700,0.800] | 155 | 86 | 0.143 | 0.833 | 0.571 | 0.781 | 0.450 | 0.841 | 0.958 | 0.012
(0.600,0.700] | 169 | 118 | 0.190 | 0.841 | 0.637 | 0.733 | 0.564 | 0.866 | 0.932 | 0.025
(0.500,0.600] | 146 | 151 | 0.240 | 0.840 | 0.672 | 0.683 | 0.661 | 0.890 | 0.899 | 0.046
(0.400,0.500] | 89 | 160 | 0.281 | 0.828 | 0.675 | 0.635 | 0.721 | 0.904 | 0.864 | 0.070
(0.300,0.400] | 86 | 156 | 0.321 | 0.817 | 0.678 | 0.600 | 0.778 | 0.919 | 0.829 | 0.096
(0.200,0.300] | 68 | 228 | 0.370 | 0.790 | 0.661 | 0.551 | 0.824 | 0.931 | 0.779 | 0.137
(0.100,0.200] | 79 | 266 | 0.427 | 0.759 | 0.643 | 0.508 | 0.877 | 0.947 | 0.721 | 0.187
(0.000,0.100] | 184 | 3270 | 1.000 | 0.248 | 0.397 | 0.248 | 1.000 | 1.000 | 0.000 | 0.888
NEW