

Python Machine Learning (CSCI 425)
Student Showcase (Final Project) Rubric

Project Title: *Malware Analysis Using ML Methods to Classify Malware and Malware Type*

Team Members: *Abraham Avila, Klaus King*

Evaluator: *Jeremy Bergen*

Instructions:

1. For each requirement, use 0.0 - 5.0 scale in the Score column (0 - Fail, 1 - Needs improvement, 2 - Poor, 3 - Fair, 4 - Good, 5 is Excellent)

Criteria	Score (1-5)
1. Problem Understanding	
a. Clearly defined problem statement.	5
b. Understanding of the domain and context	5
2. Data Preprocessing	
a. Data cleaning and handling missing values	5
b. Feature engineering and selection	5
c. Data normalization and scaling	4
3. Model Selection and Evaluation	
a. Selection of appropriate ML algorithms	5
b. Model training and tuning	4
c. Evaluation metrics and performance analysis	4
4. Creativity and Innovation	
a. Novelty and originality of approach	4
b. Exploration of advanced techniques (Deep Learning, e.g.)	3
5. Presentation	
a. Quality of visualizations and insights	5
b. Ability to communicate results effectively	5
Final Score	55

General Feedback:

92

85%

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Python Machine Learning (CSCI 425) Student Showcase (Final Project) Rubric

Project Title: *Melware Analysis: Using Machine Learning Methods to Classify Melware and Melware Type*

Team Members: *Abraham Avila, Nicholas*

Evaluator: *Clayton Johnson*

Instructions:

- For each requirement, use 0.0 - 5.0 scale in the Score column (0 - Fail, 1 - Needs improvement, 2 - Poor, 3 - Fair, 4 - Good, 5 is Excellent)

Criteria	Score (1-5)
1. Problem Understanding	
a. Clearly defined problem statement.	5
b. Understanding of the domain and context	5
2. Data Preprocessing	
a. Data cleaning and handling missing values	5
b. Feature engineering and selection	3
c. Data normalization and scaling	3
3. Model Selection and Evaluation	
a. Selection of appropriate ML algorithms	4
b. Model training and tuning	3
c. Evaluation metrics and performance analysis	4
4. Creativity and Innovation	
a. Novelty and originality of approach	3
b. Exploration of advanced techniques (Deep Learning, e.g.)	4
5. Presentation	
a. Quality of visualizations and insights	4
b. Ability to communicate results effectively	4
Final Score	47

General Feedback:

178