NightWatch

AI-ENABLED CAMPUS SECURITY

SoftCom

Problem Statement

With reports flooding our campus of nighttime cycle thefts, we challenge you to harness the power of AI/ML and put an end to these sneaky thieves. Leverage the live image feed from the mess cameras and a dataset of suspicious individuals to train a cutting-edge model that can swiftly identify potential thefts. Your mission: thwart the thieves, save the cycles, and restore peace on campus during the night hours.

Judgement Criteria

Sherlock Accuracy (40 Points)

Can your model outsmart the stealthy culprits and accurately flag potential thefts from the live feed? We want to see how many incidents your model can nail without crying wolf.

Flash-like Response (10 Points)

How fast can your model raise the alarm bells? We need your AI to be quicker than the blink of an eye, identifying theft attempts in real-time to keep our campus cycles safe.

Eagle-Eyed Sensitivity (30 Points)

Strike the right balance! Your model should be sensitive enough to catch every attempted theft but not too sensitive that it mistakes innocent late-night snack runs for criminal activity.

Night Vision Robustness (10 Points)

Can your model see through the shadows and dim lighting in the mess area, regardless of the camera angle? It's got to be as reliable as a trusty night owl.

Ethical Hero (10 Points)

Ensure your model plays fair. No biases, no invasion of privacy. We want a model that fights crime without stepping on anyone's rights.

Checkpoints

Data Preprocessing (11PM - 2AM)

Complete preprocessing of the provided dataset to ensure the data is ready for training.

Model Training (2AM - 4AM)

Train the AI/ML model using the preprocessed dataset, ensuring it can identify suspicious activities accurately during the night.

Live Feed Integration (4AM - 6AM)

Develop a mechanism to integrate the model with the live image feed from the mess area camera, allowing real-time analysis.

Testing and Evaluation (6AM - 7AM)

Thoroughly test the model's performance in various scenarios and evaluate its effectiveness in differentiating between normal behavior and theft attempts.

Documentation and Presentation

Document the entire process, including data preprocessing, model training, and system implementation, and prepare a comprehensive presentation to showcase the solution's effectiveness and implementation details during the hackathon.

Resources

How to Contribute to Open Source Proje…

Dataset:

TITLE
2023-10-20 10:01:22.h264
2023-10-20 10:43:34.h264
2023-10-20 10:48:46.h264
2023-10-20 10:53:59.h264
2023-10-20 11:00:15.h264
2023-10-20 11:05:28.h264
2023-10-20 11:10:44.h264