

Week Six Status

11/11/2022

TEAM RAD

Real-time Anomaly Detection

Progress Update Sprint #2

Timeline update → 11/18/22

Goals:

- Deploy Pytorch model on Sagemaker endpoint
- Get Kinesis Firehose hooked up to the model → Define data labeling method with SageMaker Ground Truth

Gabby Rivera

Kinesis/ Data Labeling:

- Explored different ways of labeling incoming network traffic. Using inspiration from Beth data set, we can use binary variables to label the incoming traffic. Two labels, one indicating unusual activity and the second label indicating a malicious external presence not originating from the system. The binary variables indicate 0 for benign and 1 is not.
- Looked into Amazon SageMaker Ground Truth vs the other options of labeling data.
- **Next steps** - Learn the options offered by Amazon SageMaker Ground Truth to get the labeling portion ready for data coming in and out of the model

Jared Dunn

Gavin Cutchin

SageMaker:

- Tried a PyTorch specific implementation method. Led to a Jupyter Notebook instance hosting method on SageMaker. BETH Dataset is designed to run on a Jupyter Notebook instance so this could be the best method. - Gavin
- Still working on implementation of SageMaker endpoints. Authenticated computer with ECR so docker images can be uploaded. - Jared
- **Next steps** - Figure out how image files are supposed to be constructed.