MICHIGAN STATE UNIVERSITY

Alpha Presentation
Profiling Manufacturing Plant Computer Network Traffic

The Capstone Experience

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Project Overview

- Manufacturing Plant Network Traffic Increased
- Machine Learning To Detect Anomalies
- Displayed In An Easy To Understand Dashboard
System Architecture

GM Plant + Network Monitoring Tool

Netflow Log Server

MySQL

GM Network Security Team

Tableau

sklearn
Anomaly Score Aggregate
Duration Model
Client Byte Model
Server Byte Model
ELK-Verified Anomaly

August 28th 2019, 20:15:00
value: 559488060
upper bounds: 169516967
lower bounds: 0
What’s left to do?

• Improve Accuracy Of Current Models
• Develop More Models
• Introduce Weighted Model Scoring
• Introduce Different Manufacturing Plants’ Data
Questions?