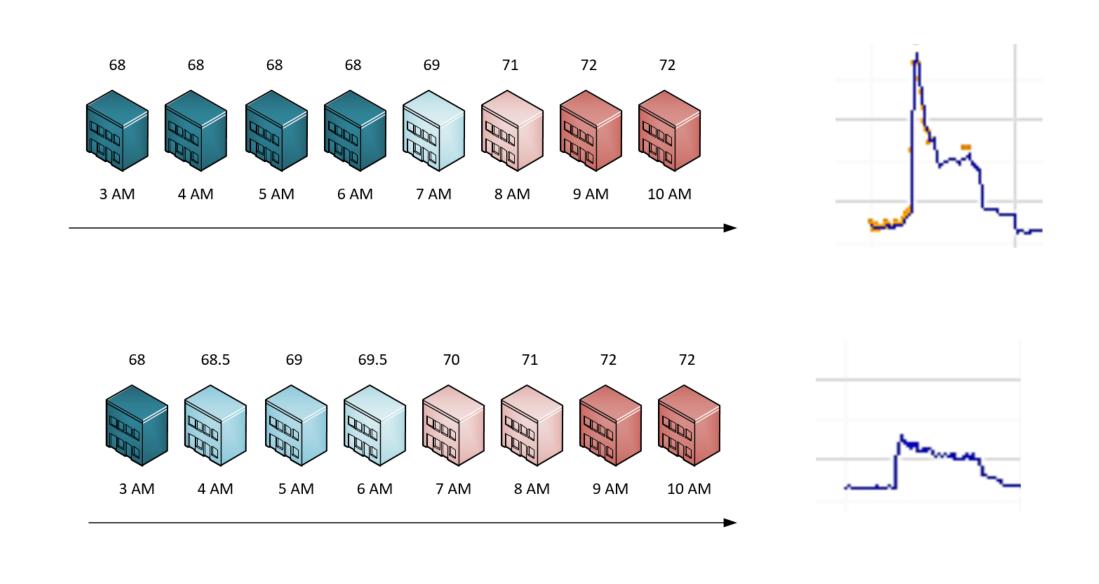
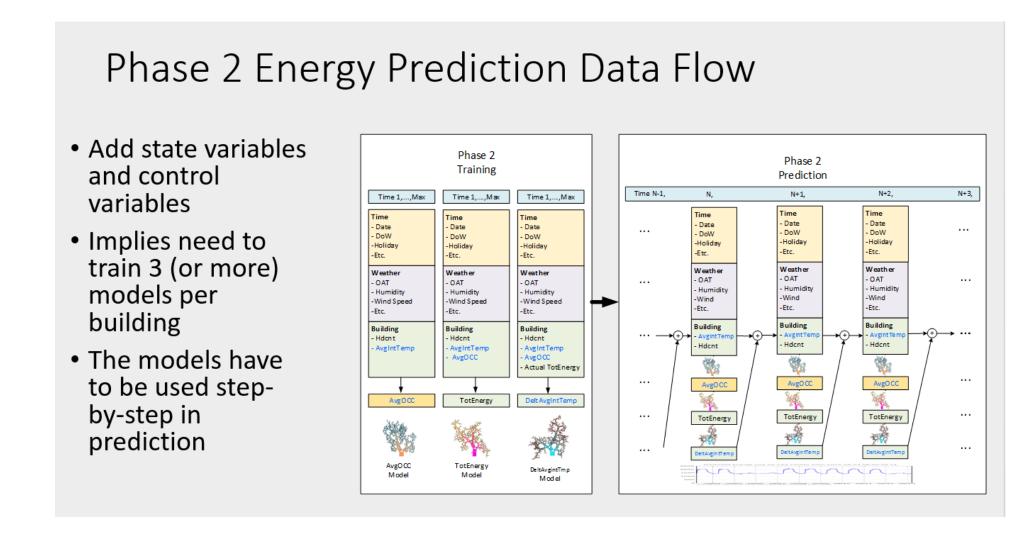
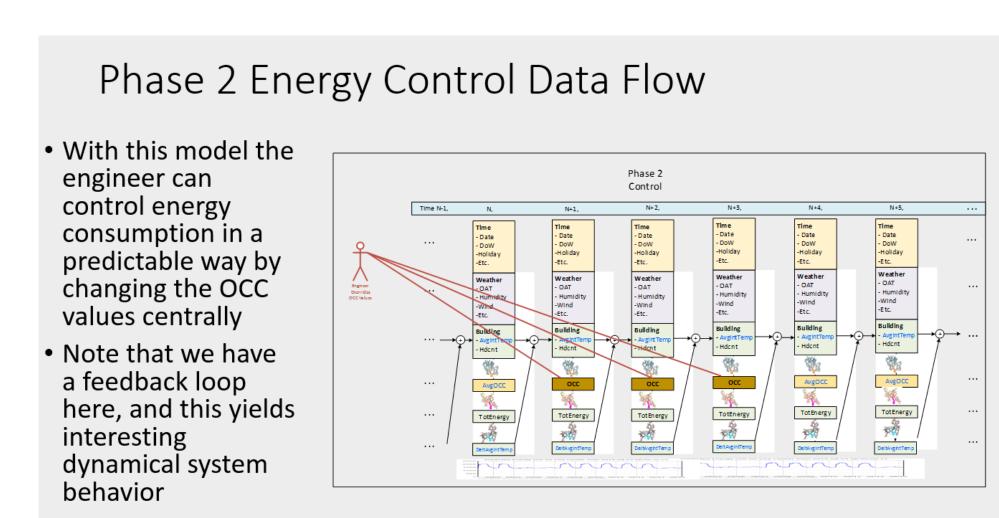
## Machine Learning, Analytics & Data Science Conference

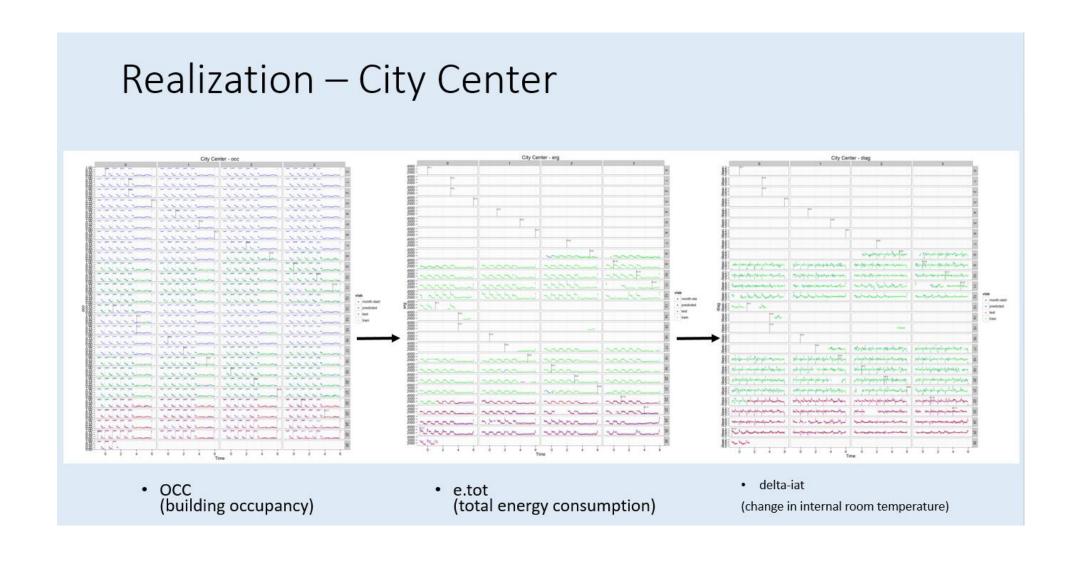
### Predicting Energy Usage for 88 Acres – Phase II

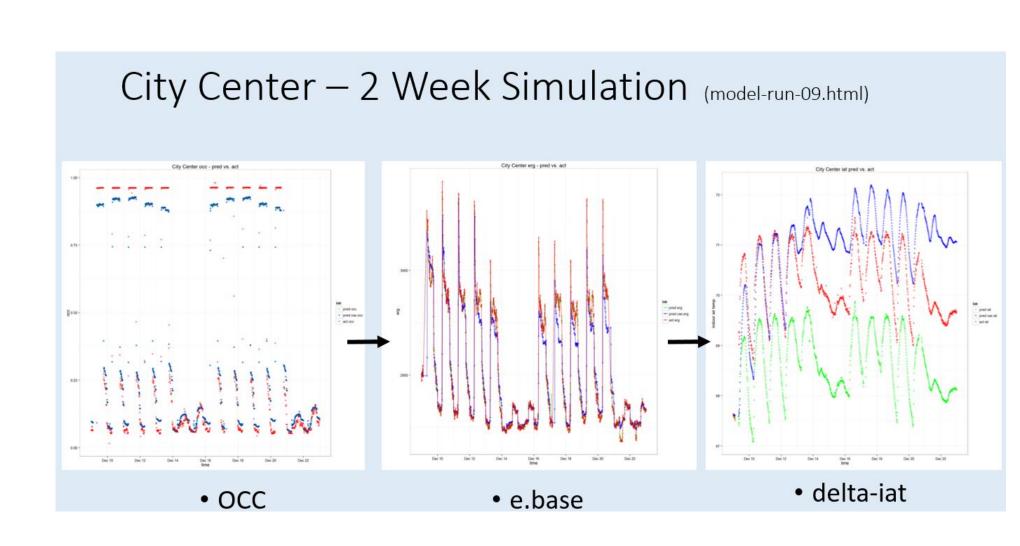
#### Command-and-Control: Controlling building energy consumption

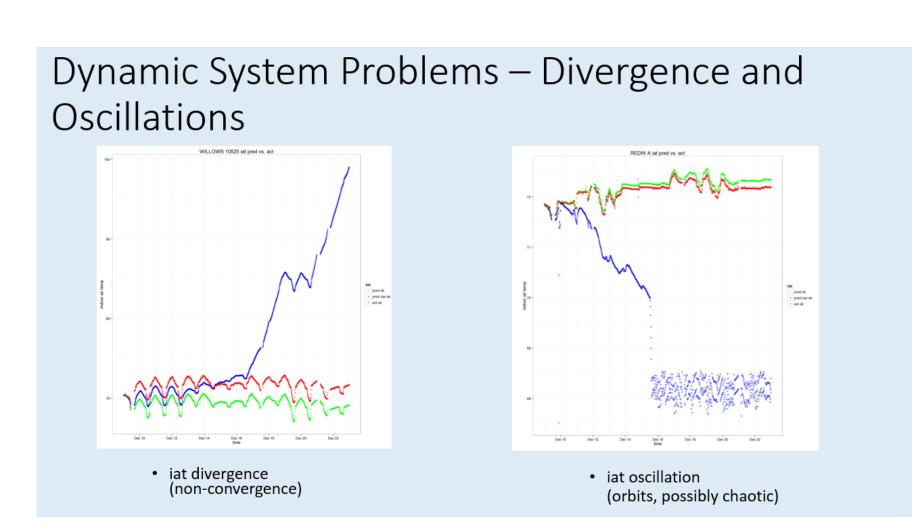


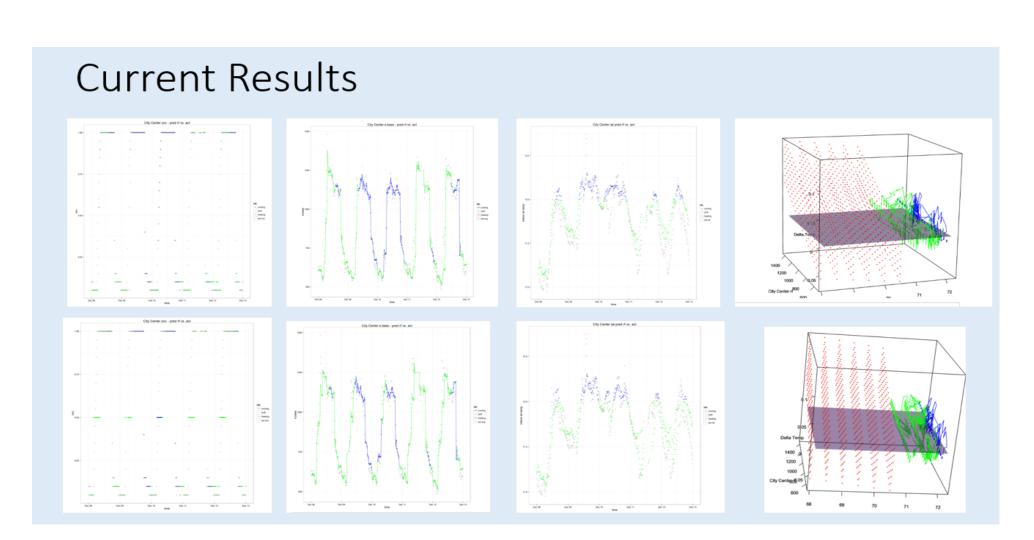




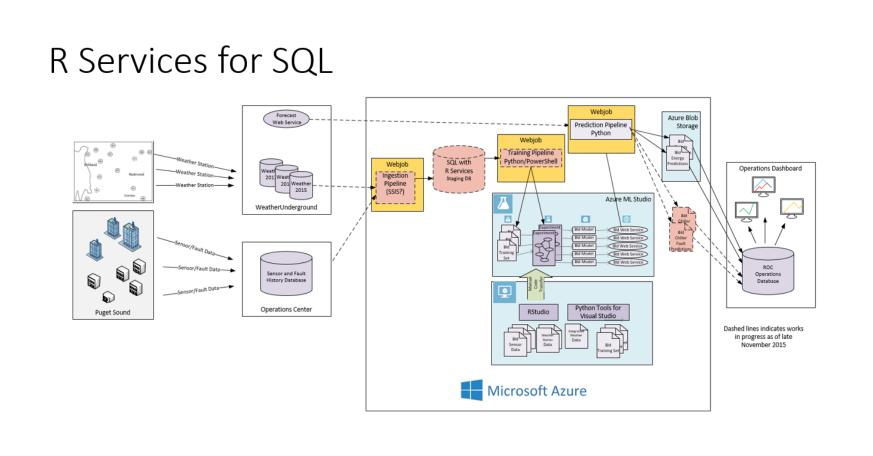


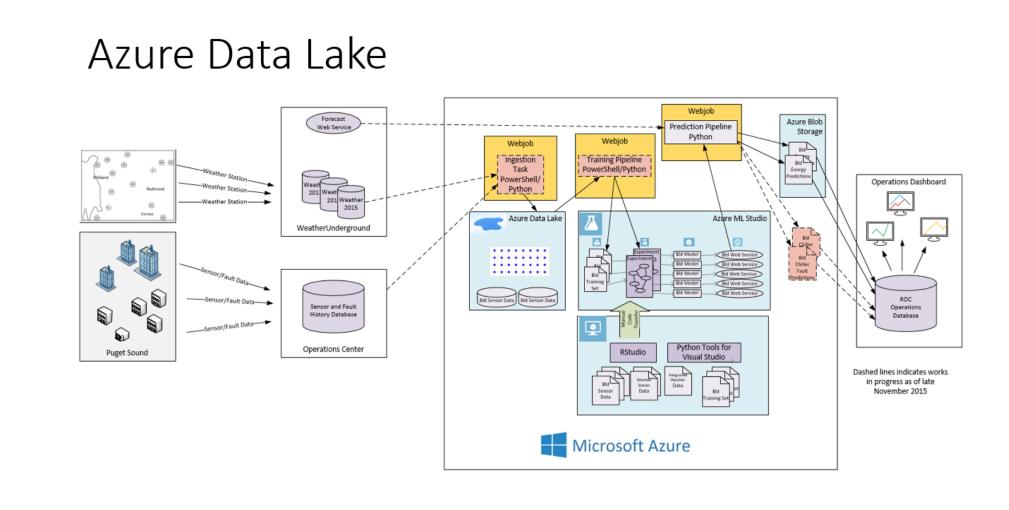




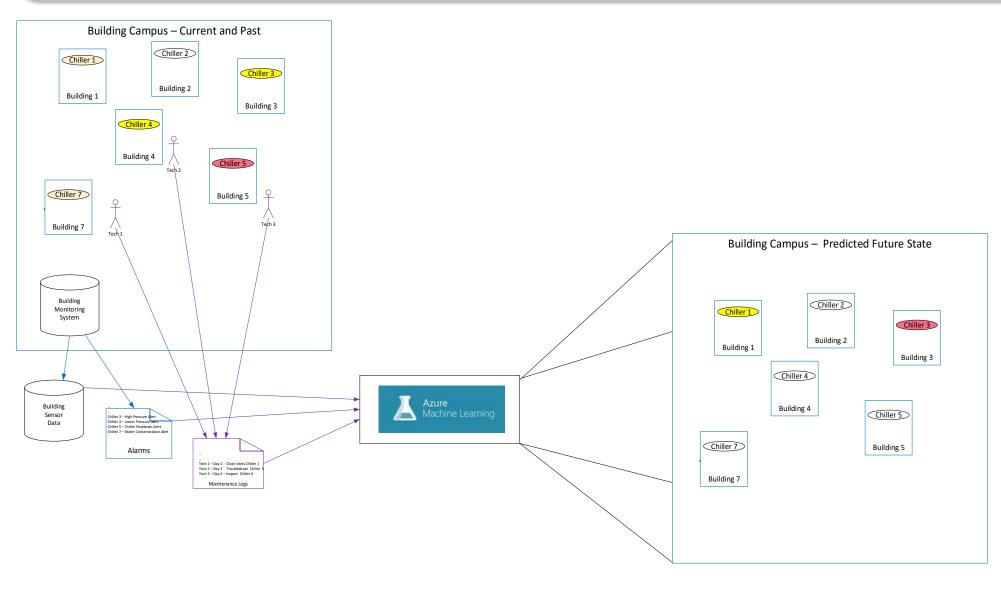


#### Deployment Options





#### Predictive Maintenance



#### Multiclass labels and data statistics

NOTE: The severity interpretations are subjective.

Severity 1: extremely severe (like a chiller breakdown)
Severity 2: data center alarms
Severity 3: Others (interpreted as not an immediate danger in any way)
Severity 4: No alarms

2 examples of Severity 1

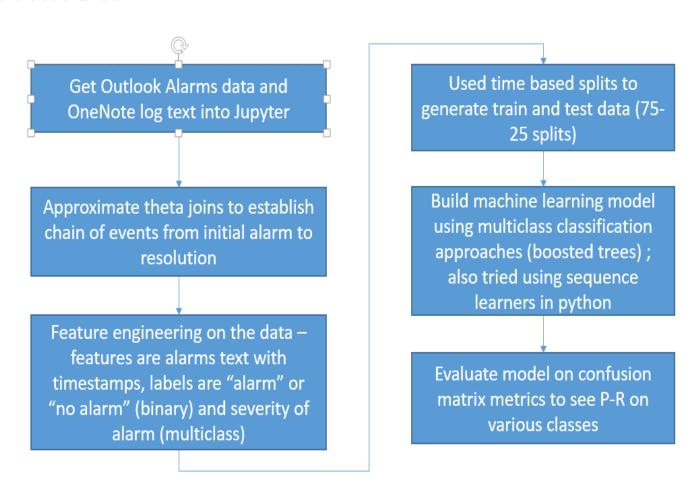
Total number of data points : 1918 (Alarms + non-alarms)

8 examples of Severity 2

Remainder 91 examples Severity 3

# HDInsight Webp Webp Prediction Pipeline Weather Underground Weather Underground Pipel Sound Dished lines indicates words in progress as of fate foverniber 2015 Microsoft Azure

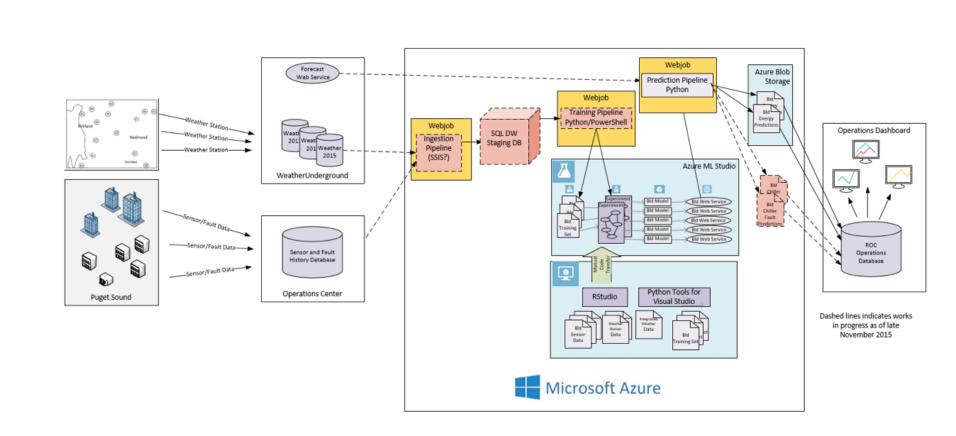
#### Workflow



#### Results - Multiclass Confusion Matrix

Actual (col), Predicted (row)	Severity 1	Severity 2	Severity 3	Severity 4
Severity 1	1	0	0	0
Severity 2	1	6	5	2
Severity 3	0	2	70	220
Severity 4	0	0	15	1578

SQL DW





Poster Session: # 157