

Confusion Matrix

Actual Label

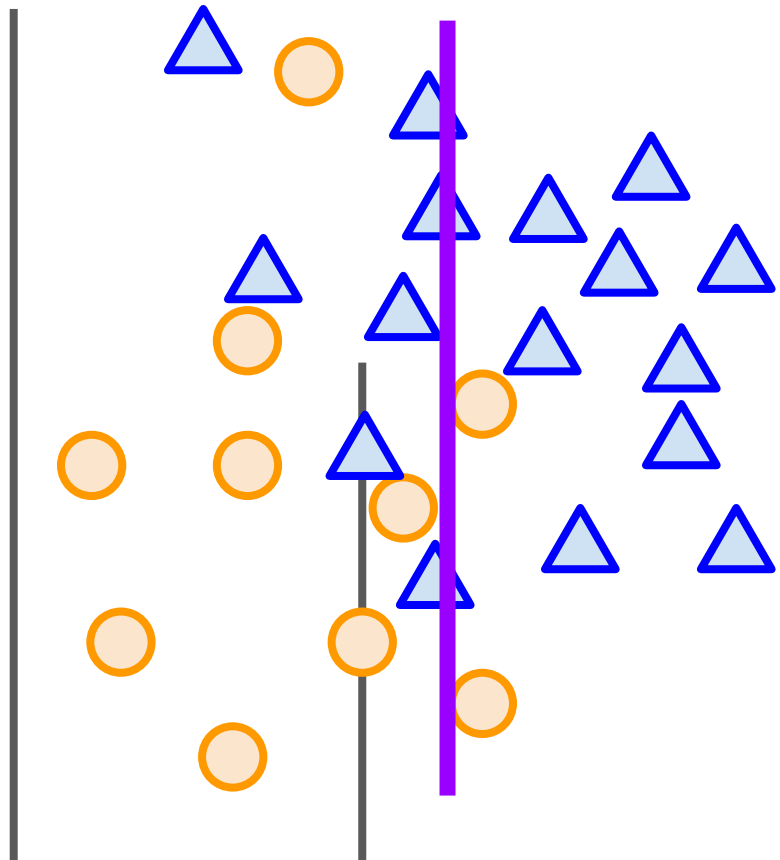
Predicted Label				
	Circle	Idle	Left-Right	Up-Down
Circle	205	10	1	46
Idle	6	199	0	32
Left-Right	9	17	223	34
Up-Down	21	8	3	186

Per-class accuracy	0.907	0.927	0.936	0.856
F1 scores	0.845	0.815	0.892	0.721

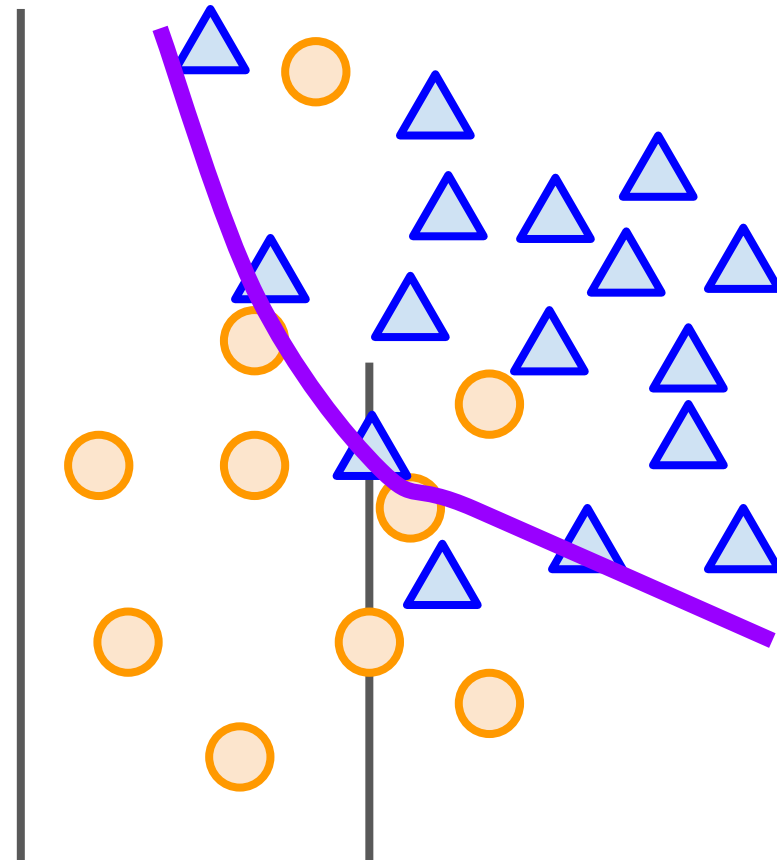
Total accuracy: 0.813

F1 average: 0.818

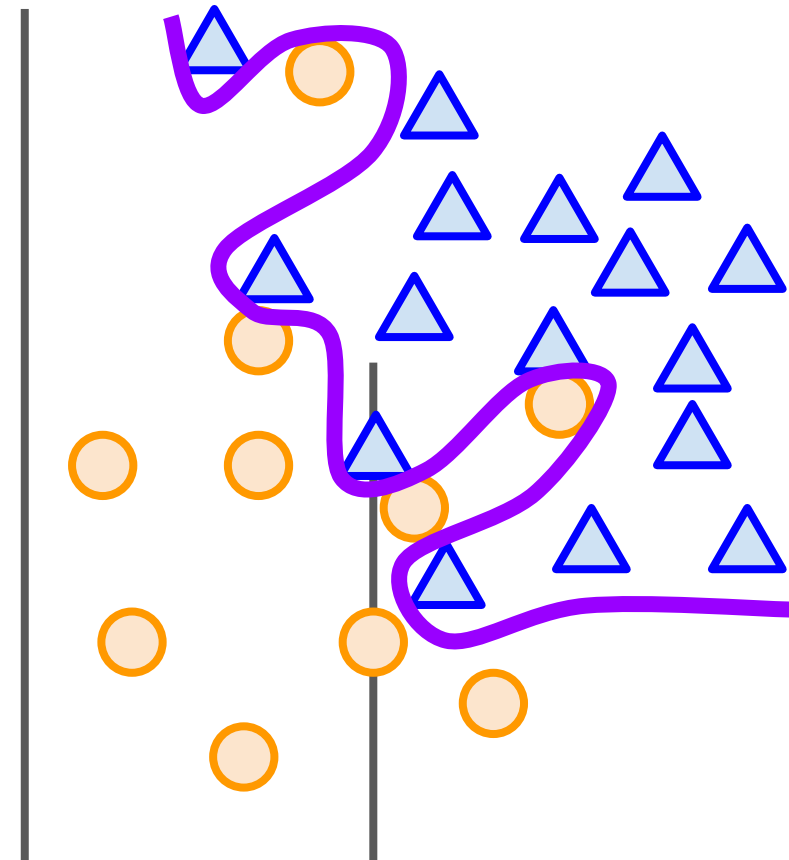
# Underfitting vs. Overfitting



**Underfit:** Model fails to capture trends in the data



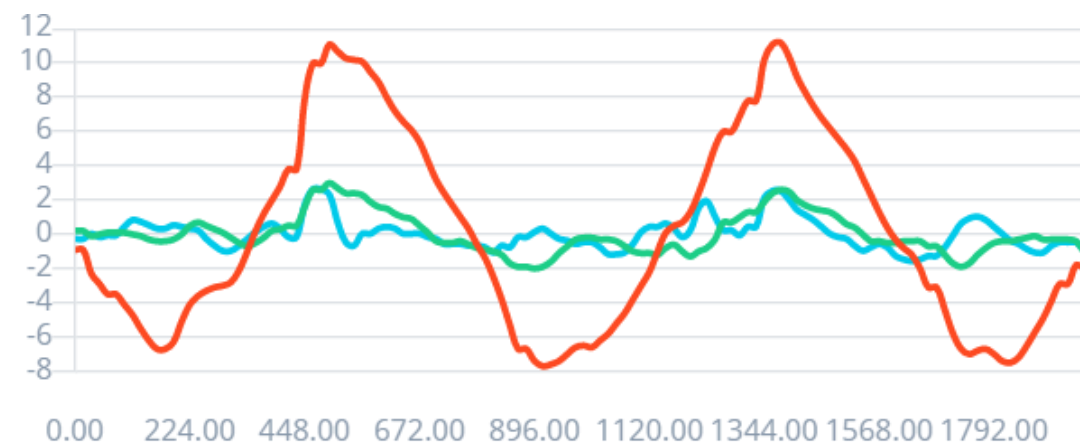
**Good fit:** Model captures trends and can generalize to unseen data



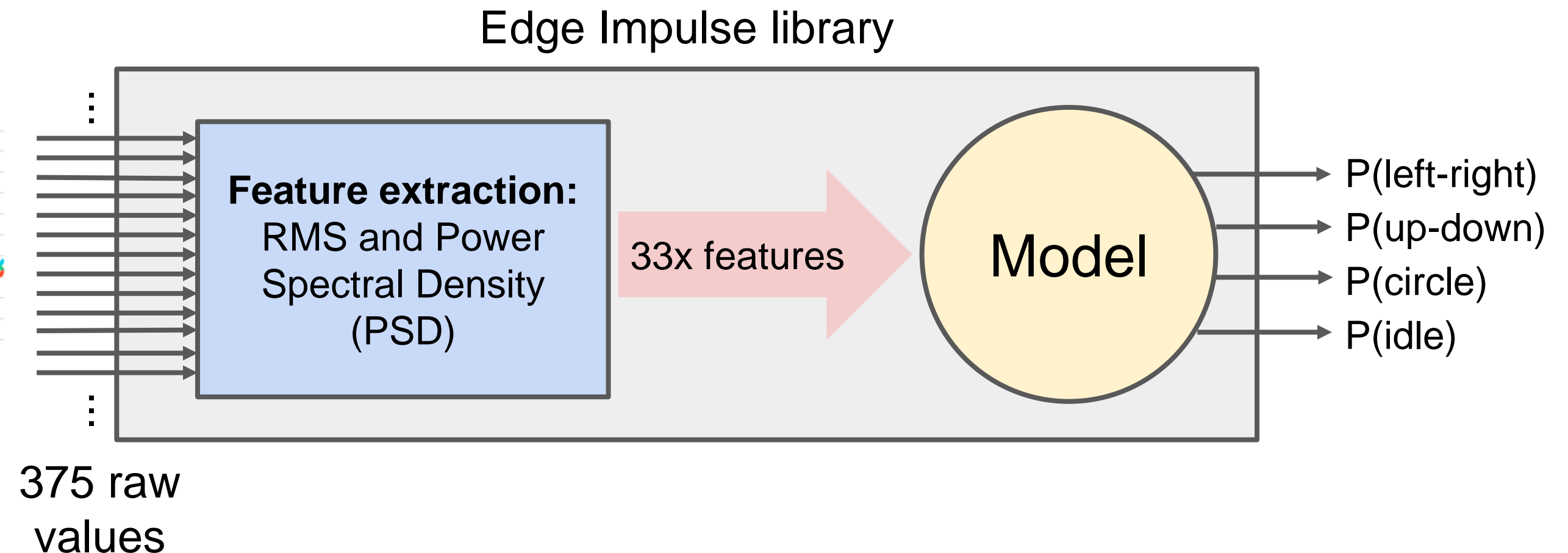
**Overfit:** Model captures training data trends but fails on unseen data

# Inference in an Embedded System

Sample accelerometer  
for 2 seconds



62.5 Hz sampling for 2 seconds  
with 3 axes = 375 values



# Anomaly Detection

