Save

Step 1: Characterization	Step 2: Synthesis	Step 3: Analysis

Synthetic Data

Select File	D:\example_data\LFP_seg_SynData.mat

Review Settings	Load

Pre-selected Bounds

Lower Bound θL	◉ Default	◯ Specify:	23.72 µV	1.41 σ
Upper Bound θU	◉ Default	◯ Specify:	23.72 µV	1.41 σ

Time (<θL)	0.511 %	False Peak Rate	12.81 Hz	49.5 %
Time (>θU)	0.489 %	True Peak Rate	13.04 Hz	50.5 %

Select Bounds

Detection Performance and ROC Curve

Number of Thresholds   ◉ Default   ◯ Specify: 50

Detect on ◉ Amplitude peak ◯ Amplitude | Evaluate |

Detection Threshold   0.472 z-score

44

0 30 60 90 120 150 180 200   µV

False Positive Rate   2.56 Hz

20

0 10 20 30 40 50 60 70 80 90 100   %

Conditional Probability Given a Detection

> the Threshold ▼

False (FDR)	22.3 %
Intermediate	0 %
True (PPV)	77.7 %

Results

Preselected bounds are calculated.
Upper bound is changed from 1.11 σ to 1.41 σ

Detecting on amplitude peak.
Optimal threshold:
Maximum Youden: 0.472 Z-score, 44.1 µV
Maximum Youden (in Hz): 0.472 Z-score, 44.1 µV

Detection threshold: 44.08 µV, False positive rate: 20.01 %

Normalize