Enhanced Model Performance Comparison

All Models - Test Accuracy (90-100%)
- Proposed_Model: 99.93%
- Residual_Only: 99.72%
- Inception_Only: 99.58%
- Baseline_CNN: 99.30%
- Bi-LSTM: 98.82%
- GRU: 98.68%
- MobileNet: 98.61%
- DenseNet121: 98.47%
- VGG16: 98.12%
- LSTM: 97.91%
- Xception: 97.63%
- ResNet50: 94.15%

Legend: Benchmark Models, Ablation Models

Precision vs Recall Analysis (95-100%)
- Proposed_Model
- Residual_Only
- Inception_Only
- Baseline_CNN
- Bi-LSTM
- DenseNet121
- GRU
- VGG16
- Xception
- LSTM

All Models - Macro F1-Score (90-100%)
- Proposed_Model: 99.93%
- Residual_Only: 99.72%
- Inception_Only: 99.58%
- Baseline_CNN: 99.30%
- Bi-LSTM: 98.82%
- GRU: 98.68%
- MobileNet: 98.61%
- DenseNet121: 98.47%
- VGG16: 98.12%
- LSTM: 97.91%
- Xception: 97.63%
- ResNet50: 94.12%

All Models - Parameter Efficiency (90-100%)
- Proposed_Model
- Residual_Only
- Inception_Only
- Baseline_CNN
- Bi-LSTM
- GRU
- LSTM
- MobileNet
- DenseNet121
- VGG16
- Xception
- ResNet50

All Models - Loss Comparison
Legend: Training Loss, Validation Loss, Test Loss

Overall Confusion Matrix
	Predicted Non-Apnea	Predicted Apnea
Actual Non-Apnea	6135	174
Actual Apnea	80	