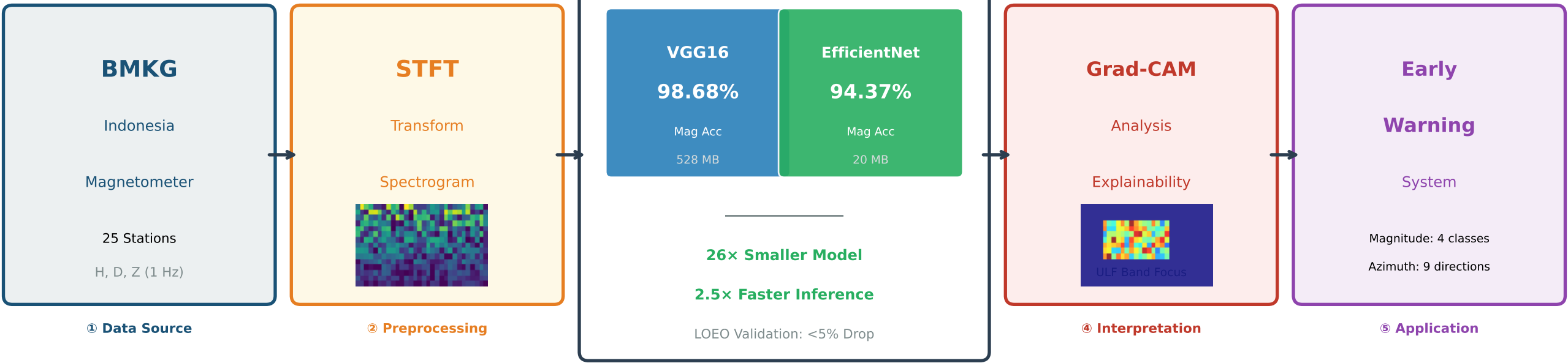


Deep Learning-Based Earthquake Precursor Detection from Geomagnetic Data

Comparative Study: VGG16 vs EfficientNet-B0 with Grad-CAM Interpretability



Key Contributions

* First VGG16 vs EfficientNet comparison for geomagnetic precursor detection

* Multi-task learning: Magnitude + Azimuth prediction simultaneously

* Physically interpretable: Grad-CAM confirms ULF band focus (0.001-0.01 Hz)