

Quick Start

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Usage

Add path to `"./IVA"` and all the subfolders (e.g., `"./IVA/run"`).

```
addpath(genpath("./IVA"))
```

Create a two-channel mixture of two speech signals.

For your first run, a pop-up window will ask whether to download the [dev1 dataset from SiSEC2011](#). Click "Yes" to continue.

```
[signal1, signal2, fs] = util_loadSampleMixture;  
mixture                = signal1 + signal2
```

Apply FastADMM-IVA [1] with default settings.

```
separated = run_IVA_FastADMM(mixture)
```

Check the result.

```
util_visualizeAndPlay(mixture, separated, fs);
```

Reference

1. Hiroko Watarai, Kazuki Matsumoto, Kohei Yatabe, "Fast and flexible algorithm for determined blind source separation based on alternating direction method of multipliers" (2025).