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**算法 1** RemoteVoiceControlSys

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**输入:** 模拟语音指令 $voice$

**输出:** 相应控制操作 $signal$

- 1:  $sampledSignal \leftarrow \text{signalsampling}(voice)$  // 语音信号的采样
  - 2:  $quantizedSignal \leftarrow \text{signalquantization}(sampledSignal)$  // 语音信号的量化
  - 3:  $sourceCodes \leftarrow \text{sourceencode}(quantizedSignal)$  // 信源编码
  - 4:  $channelCodes \leftarrow \text{channelencode}(sourceCodes)$  // 信道编码
  - 5:  $modulatedCodes \leftarrow \text{modulation}(channelCodes)$  // 调制
  - 6:  $transmittedCodes \leftarrow \text{channeltransmission}(modulatedCodes)$  // 信道传输
  - 7:  $demodulatedCodes \leftarrow \text{demodulation}(transmittedCodes)$  // 解调
  - 8:  $channelDecodes \leftarrow \text{channeldecode}(demodulatedCodes)$  // 信道解码
  - 9:  $sourceDecodes \leftarrow \text{sourcedecode}(channelDecodes)$  // 信源解码
  - 10:  $signal \leftarrow \text{speechrecognition}(sourceDecodes)$  // 语音识别
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