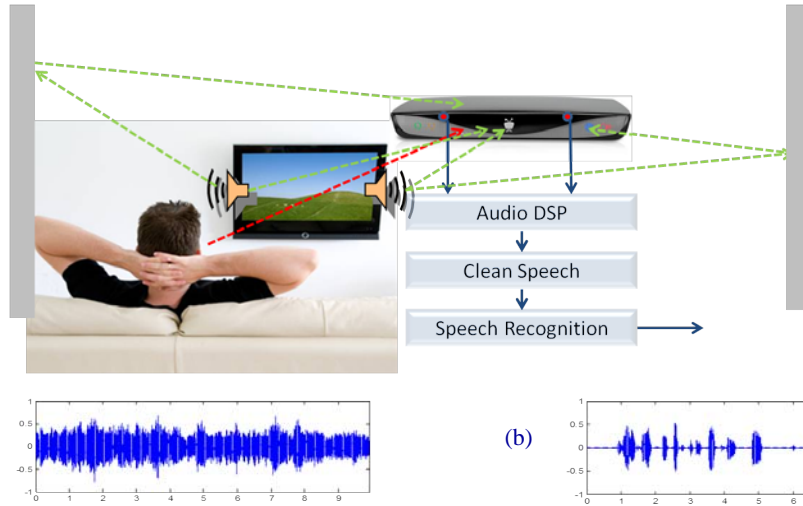




Hands-Free TV Voice Control with Dual Microphone Array

Headquarters

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Speech recorded in a typical home environment when TV sound is on with:
(a) single microphone and (b) LcT dual microphone array.

Features:

- Hands free
- Remote free
- No need to mute TV

Technologies:

- Dual microphone array
- Adaptive beam forming
- Adaptive TV sound cancellation
- Noise reduction

Product Demos

www.licreative.com/demos

Introduction

To support completely hands-free TV voice control and search, Li Creative Technologies (LcT) has developed a dual microphone array solution for robust voice capture. A user utters voice commands directly at the TV from a distance of 4 meters away, and our solution cancels TV sound and background noise and outputs clean speech for speech recognition. Consequently, a user does not need to mute the TV nor talk into a remote.

Technical Description

LcT's solution utilizes advanced audio signal processing, including adaptive beam forming, adaptive sound cancellation, and noise reduction. We integrate a two-sensor microphone array with our DSP algorithms. Our technology can improve speech recognition accuracy from 0% to over 90% when the TV sound on.

Sales and Licensing

LcT offers two product solutions for TV, set-top box, and control panel makers, speech solution providers, and home automation integrators: (1) a low cost, plug-and-play PCB module to replace the traditional audio codec unit. Customers do not need to do any hardware or software work. (2) ARM or DSP based software for a customer's hardware platform. Business customers are encouraged to contact LcT for real-time demos and implementation.

Our Company

Li Creative Technologies (LcT), Inc., located in Florham Park, New Jersey, USA, is an innovator in audio, speech, and biometric solutions. Established in 2002 by former Bell Labs scientists, LcT licenses and sells technology, software, design, and product solutions to the mobile, communications, e-commerce, healthcare, video conference, and transportation industries. LcT is a winner of the 2011 CES Innovations Design and Engineering Award.