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ECE-395A: Senior Electrical Engineering Projects

Abstract

This project focuses on the ability to separate and enhance one audio source amongst many different audio sources. The goal is to emulate the cocktail party effect, the phenomenon of a human’s ability to focus on one voice while filtering out other noises. This project will attempt to isolate and amplify the desired audio source in real time by utilizing deep neural networks. The audio source separator aims to help people with hearing loss have clears with others in a crowded area.