**COMMUNICATION SCIENCES AND DISORDERS**
**COLLEGE OF ALLIED HEALTH SCIENCES**

**SUMMER RESEARCH OPPORTUNITIES FOR UNDERGRADUATE students**

**FOR APPLICATION YEAR: 2024**

**PROJECT TITLE: <u>Visual-Acoustic Biofeedback for Voice Training: Developing a Web Interface for Therapy Practice</u>**

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## Project Description

You will be joining a collaborative team of scientists across the disciplines of speech-language pathology, computer science, biomedical engineering, and laryngology, to help develop a web platform that provides visual-acoustic biofeedback for home voice practice. This work is part of on-going internal UC and NIH funded projects to increase access to voice therapy for those who cannot afford or travel to services. Current IRB approvals: 2021-0724; 2022-0250.

Qualifications:
-- Preferred academic background: computer science, biomedical engineering
-- Prerequisite skills: coding experience in JAVA
-- Preferred skills: strong attention to detail, well-organized, works well with others, enthusiasm for using technology for health applications

Knowledge/Skills UPRISE student will acquire:
-- Cross-disciplinary collaboration skills: speech-language pathology, biomedical engineers, physicians (laryngology), web and app-developers (computer scientists, graphic designers)
-- Web development skills
-- Foundational knowledge of voice disorders, exercise science, and biofeedback principles
-- Data ethics and integrity (HIPPAA considerations, CITI training, IRB on-boarding steps)