COMMUNICATION SCIENCES AND DISORDERS
COLLEGE OF ALLIED HEALTH SCIENCES

SUMMER RESEARCH OPPORTUNITIES FOR UNDERGRADUATE students

APPLICATION DEADLINE: 03/01/2024

PROJECT TITLE: Visual-Acoustic Biofeedback for Voice Training: Developing a Web Interface for Therapy Practice

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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 ongoing 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 (HIPPA considerations, CITI training, IRB on-boarding steps)