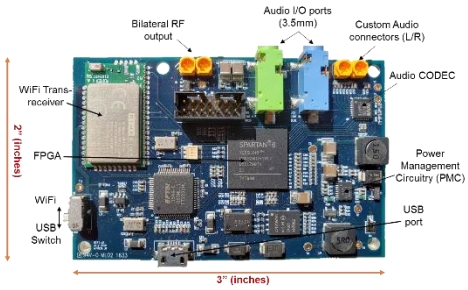
CCi-MOBILE Research Interface
for Cochlear Implant and Hearing-Aid Research
Application for CCi-MOBILE

APPLICATION INSTRUCTIONS AND DETAILS FOR A FORMAL REQUEST OF THE CCI-MOBILE RESEARCH PLATFORM

The CCi-MOBILE Research Platform, developed at UT-Dallas, provides the research community with an open-source, flexible, easy-to-use, software-mediated, computing interface to conduct a wide variety of listening experiments. CCi-MOBILE supports electric stimulation of cochlear implants (CI) and acoustic stimulation of hearing aids (HA) independently, as well as bimodal hearing (CI+HA). The platform is suited to address hearing research topics ranging from the cocktail party effect to new sound coding strategies to sound localization/lateralization. CCi-MOBILE utilizes commercially available smartphone/tablet devices as portable computing machines to execute sound processing routines that enables investigators to perform experiments both in laboratory settings and real-time in the field (naturalistic environments). The interactive software suite is provided to users through an open-source download option from our website and at our GitHub page. To ensure sustainability, there is a membership cost associated with the adoption of CCi-MOBILE as production, hardware updates, and maintenance of current units in the field incur a real expense. Memberships vary from low cost, short-term leases to full ownership of the research interface, with options to request additional NIH supplemental support (for those with an active NIH grant). Our motivation is to see CCi-MOBILE stimulate cutting edge research in the field of cochlear implants, hearing aids, hearing, and speech science.



This Application Form is needed to ensure UT-Dallas CRSS-CILab is able to deliver as many CCi-MOBILE platforms to support the interest and demand from the research community. An independent CCi-MOBILE Advisory Panel will review applications and make recommendations to UT-Dallas CRSS-CILab moving forward to allow your organization to qualify for adoption.

PERSONAL INFORMATION

Full name _____

Email address _____

Phone number _____

University/company name _____

University/company address _____

UNIVERSITY INFORMATION (IF APPLICABLE)

Funding source _____

Do you have any active IRB protocols for your current research?

☐ Yes

☐ No

Are you familiar with your institution's IRB application process?

☐ Yes

☐ No

Link to your lab website (optional) _____

RESEARCH INFORMATION

Select your area(s) of research

A. Cochlear implants

☐ Auditory modeling
☐ Bilateral research
☐ Custom frequency mapping
☐ Envelope-based processing
☐ Listening experiments
☐ Machine learning
☐ Music processing
☐ Noise suppression
☐ Objective metrics (e.g., sound quality, speech intelligibility)
☐ Other (list below)
☐ Physiological metrics (e.g., EEG, EMG, ECAP, ECoG)
☐ Pre-processing algorithm development
☐ Signal processing
☐ Sound coding
☐ Speech enhancement
☐ Subject-specific signal processing solutions
☐ Temporal fine structure-based processing
☐ Unilateral research

Other

_____

B. Hearing aids

☐ Other (list below)
☐ Signal processing
☐ Sound coding

Other

_____

RESEARCH INITIATIVES

Define the main objective/hypothesis of your research

_____

Briefly describe how CCi-MOBILE can aid in your research

_____

Email this application to john.hansen@utdallas.edu who will pass the application to the Advisory Committee and follow up with a decision.

Thank you for considering CCi-MOBILE in your laboratory/institution!