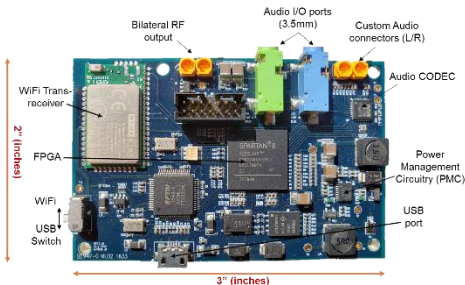


CCi-MOBILE Research Interface for Cochlear Implant and Hearing-Aid Research Application for CCI-MOBILE

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. It also 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.



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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

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

Other

B. Hearing aids

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

Other



Cochlear Implant Laboratory
The University of Texas at Dallas



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!



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The University of Texas at Dallas

