IMAGINE RIT
INNOVATION + CREATIVITY FESTIVAL

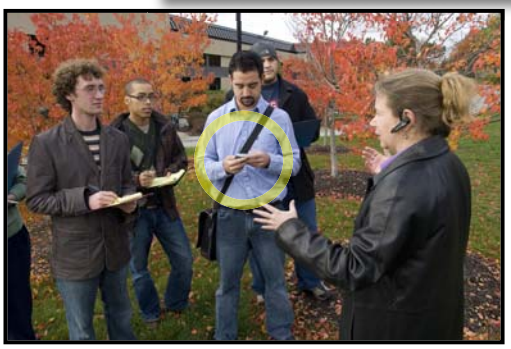
R·I·T ROCHESTER INSTITUTE OF TECHNOLOGY
National Technical Institute for the Deaf

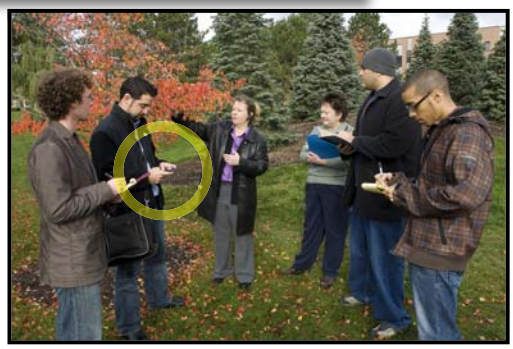
C-Print® Remote Research

Challenge:

When deaf and hard-of-hearing students attend field trips, they are often at a disadvantage. If students are using an interpreter, the interpreter may be at risk due to the terrain of the field visit or weather conditions. If students normally receive speech-to-text support in the classroom, current technology cannot support the service in the field. This project seeks to address these problems by providing an alternative speech-to-text support that will enhance STEM learning.

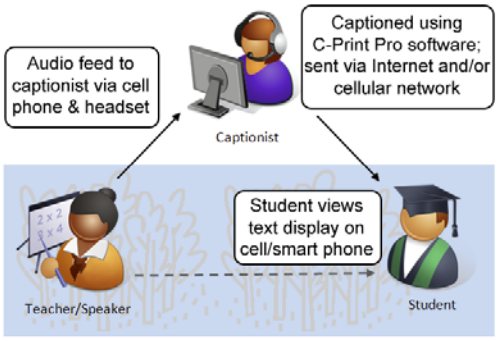
A student views text of instructor's lecture on a Smartphone.





Objective:

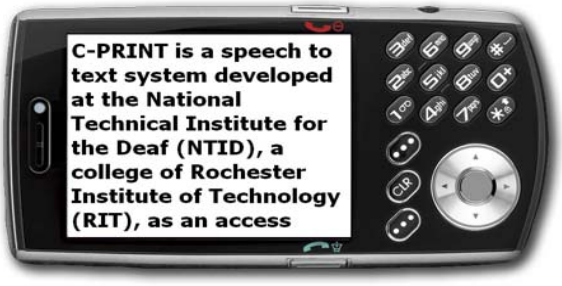
To develop a remote speech-to-text assistive technology (remote C-Print) that will allow individuals who are deaf and hard of hearing, including those with low vision, to view real-time transcription in remote, non-traditional settings (for example, field trips) using a handheld device such as a Smartphone.



Examples of field trip trials:

- Monroe County Water Authority
- High Falls Brewery
- Casa Larga Winery
- Kodak (Product and Package Dynamics/ Materials Characterization Labs)
- Frontier Telephone & PAETEC
- George Eastman House
- ABF Freight
- P&R Industries

Smartphones receive and display text in real time.



Standard display

Display options for low vision users:

"Inline" display

"Banner" display

Project Title and Sponsor:

Supporting Deaf and Hard of Hearing Undergraduate Students in STEM Field Settings with Remote Speech-to-Text Services, National Science Foundation, 2007-2010