## IMLS-Funded Research Assistant Position for PhD students (Spring + Summer 2023; 50% appointment; on-campus)

Project Title: Promoting Computational Thinking Skills for Blind and Visually Impaired Teens Through Accessible Library Makerspaces

Supervising faculty (Principal Investigators [PIs]): Drs. JooYoung Seo and Kyungwon Koh, School of Information Sciences

We are looking for a PhD student who will assist the PIs with the project that aims to create more inclusive and accessible coding/making activities for blind and visually impaired (BVI) learners. This project received the IMLS National Leadership Applied Research funding: LG-252360-OLS-22. The selected RA for Spring-Summer 2023 will engage in Phase 2 of the multi-year research project. Working with American Printing House for the Blind (APH), Disability Resources & Educational Services (DRES), and the Information Accessibility Design & Policy Program (IADP), Phase 2 will focus on curriculum development and pilot test of accessible coding and electronics activities using CodeJumper, Snap Circuits, and Snapino to promote BVI learners' computational thinking skills at the Champaign-Urbana Community Fab Lab.

Specific activities include the following:

- Prototype development (tools and summer camp program design). (Feb May 2023) PI, Co-PI, RA
- Research instrument developments and testing (interview questions and protocols, etc.) (Feb May 2023) PI, Co-PI, RA
- Recruitment of ~10 BVI teens (Feb April. 2023)- PI, Co-PI, RA
- Fab Lab staff straining on the summer camp program (May 2023) PI, Co-PI, RA, Fab Lab staff
- Summer Camps; data collection from BVI teens during the summer camp (June 5-7, 2023) PI, Co-PI, RA, Fab Lab staff, iSchool independent study students, BVI teens
- Debrief and interviews with Fab Lab staff members (June 2023) PI, Co-PI, RA, Fab Lab staff, iSchool independent study students.
- Document the summer camp program (June-July 2023) PI, Co-PI, RA
- Analysis of the Phase 2 data (June-July 2023, and will continue in Phase 3) PI, Co-PI, RA
- PI & Co-PI offer Independent Study for iSchool students (Feb May 2023) PI, Co-PI, RA, iSchool independent study students
- Advisory board virtual meeting (July 2023) PI, Co-PI, RA, advisory board members

PhD students who are interested in accessibility, computer science education, and informal learning with strong communication skills are encouraged to apply. This position might be extended through the next phases of the project, which focus on the development and

implementation of accessible computational thinking tools and curriculum for BVI learners in library makerspaces in Illinois, depending on the expertise and interest of the candidate.

Feel free to contact the supervising faculty members with any questions: Drs. JooYoung Seo (jseo1005@illinois.edu) and Kyungwon Koh (kkoh@illinois.edu).

If interested, please send both Drs. Seo and Koh a CV and cover letter ASAP. Review of applications will begin immediately. Applications will be accepted until the position is filled. Applications received by 11/1/2022, will receive full consideration.