

Funded PhD Graduate Trainee Position in AI-Driven Speech Assessment and Healthcare Implementation

Supervisors: Dr. Monika Molnar and Dr. Karla N. Washington

Location: University of Toronto, St. George Campus. Toronto, Canada.

Start Date: September 2027

We are seeking a highly motivated PhD Graduate Trainee to join an interdisciplinary research program led by Dr. Monika Molnar and Dr. Karla Washington at the Department of Speech-Language Pathology at the University of Toronto. The successful candidate will contribute to the development, validation, and implementation of an AI-driven diagnostic system for speech sound disorders. This research integrates speech science, cognitive science, artificial intelligence, and implementation science with the goal of improving diagnostic accuracy and supporting equitable access to care for linguistically and culturally diverse populations. The position offers opportunities for advanced training in speech analytics, machine learning, healthcare implementation, and interdisciplinary research.

The successful candidate will be enrolled in the PhD program at the Rehabilitation Sciences Institute (RSI), Temerty Faculty of Medicine, University of Toronto. RSI is a leading interdisciplinary graduate program that brings together researchers, clinicians, and trainees from diverse disciplines. Through interdisciplinary training, students develop the research and leadership skills needed to advance innovation and improve health outcomes across diverse populations.

Responsibilities

The successful candidate will:

- Design and conduct studies aligned with project objectives
- Participate in the collection, management, and analysis of data
- Collaborate with researchers, clinicians, speech-language pathologists, and healthcare partners
- Apply quantitative and/or qualitative research methods to evaluate AI implementation and performance
- Present findings at national and international conferences
- Publish research results in peer-reviewed journals
- Participate in knowledge mobilization and stakeholder engagement activities
- Contribute to team meetings, trainee activities, and interdisciplinary collaborations

Qualifications Required

- Master's degree in Communication Sciences and Disorders, Speech-Language Pathology, Linguistics, Psychology, Education, Computer Science, Cognitive Science, Health Sciences, Biomedical Engineering, Data Science, or a related field

- Strong academic record and demonstrated research potential; Previous research experience gained through a thesis, research assistantship, or comparable work
- Ability to work independently and collaboratively in an interdisciplinary environment
- Excellent written and verbal communication skills

Preferred

Candidates with experience in one or more of the following areas are especially encouraged to apply:

- Speech sound disorders and speech-language pathology
- Acoustic phonetics and speech analysis
- Machine learning, artificial intelligence, or data science
- Natural language processing or speech technologies
- Healthcare implementation science
- Health services research
- Human-computer interaction and usability evaluation
- Qualitative or mixed-methods research
- Statistical analysis using R, Python, or related tools

Application Process

Applicants should submit:

- One-page cover letter outlining research interests and fit with the project
- Curriculum vitae
- Unofficial Undergraduate and Graduate Academic transcripts
- Contact information for two to three academic references

Review of applications will begin on **November 2, 2026**, and continue until the position is filled. Both domestic and international students are welcome to apply.

Please email your application package to both Dr. Monika Molnar (monika.molnar@utoronto.ca) and Dr. Karla N. Washington (karla.washington@utoronto.ca).