



2021 Summer AI Research Lab Internship Program

Description

ETS Canada's AI Research Lab's work drives the innovation and development of teaching and learning technologies that are grounded in research and powered by next-generation AI. The Lab is dedicated to working closely with end-users to uncover real-world needs, and co-designing and prototyping solutions to meet those needs. Staff is made up of research engineers and user experience researchers and designers.

Applying for an Internship in the AI Research Lab

Interns accepted into the AI Research Lab summer program will participate in user needs, discovery and exploration, solution ideation and validation, capability and prototype development, iterative user validation and data-driven solution optimization. We work in agile development teams to apply the best of foundational learning and cognitive science to the design, development and testing of solutions to meet educator and learner needs. Upon the completion of the program you'll have the opportunity to present your findings to your team.

Applicants who have interest and expertise in the following would be a great fit for this program:

- learning or cognitive science
- software development
- AI and ML engineering
- user experience research and/or design
- instructional design
- product ownership

Application Procedures

Apply now by sending your resume to careers@etscanada.ca. Please include in your resume: (a) a written statement about your interest in the area(s) of research in the Lab and how your education and experience align with the work of the Lab, and (b) a list of your coursework.

Deadline

- The application deadline is February 1, 2021.

Decisions

- Applicants will be notified of selection decisions by March 31, 2021.

Duration

- Ten weeks: June 1, 2021–August 6, 2021

Compensation

- \$9,000 salary

Eligibility

- Completion of bachelor's degree
- Actively enrolled or accepted into a graduate program aligned to the Lab focus (students who have deferred enrollment due to extenuating circumstances will be considered)

Selection

The main criteria for selection will be the match of applicant interests and experience with the focus of the Lab.

ETS Canada affirmative action goals will be considered. The Research Lab values building teams of individuals from diverse backgrounds and with diverse experiences. We strongly encourage students from underrepresented groups and backgrounds to apply. Late or incomplete applications will not be considered.

AI Research Lab Descriptions

The ETS Canada AI Research Lab currently has two areas of focus: (1) Natural Language Processing (NLP) and (2) Language Learning, Teaching and Assessment (LLTA) Lab.

The NLP component is focused on developing capabilities that enable automation in assessment, learning and tool development; and engines that support recommendations and interventions.

Students with a background in data science, computer science, natural language processing, machine learning and/or deep learning would benefit from an internship in NLP component of the lab.

Possible projects in NLP might include:

- **Automated scoring** projects would offer an intern the opportunity to apply Natural Language Processing methods to written and spoken formative assessments to provide meaningful insights to educators and learners.
- **Real-time targeted speaking feedback** projects would include the use of Natural Language Processing (NLP) methods paired with theoretical research and user feedback to understand the features that are most important for users to receive feedback on and how to reveal those features and to users.
- **Predicting outcomes through process data** projects would involve thinking through the user progressions within a system, understanding where important user interactions are, and aligning both with what data are captured/available in the system.

The LLTA component of the lab is focused on developing prototypes to support the establishment of an ecosystem of interconnected language learning and assessment systems that provide personalized and ongoing support for language learners domestically and throughout the world.

Students with a background in speech recognition, natural language processing, deep learning, knowledge tracing, data science, learning science, cognitive science, linguistics, and software engineering, software development, computer science, instructional design, or user experience research and design would benefit from an internship in the Language Learning, Teaching, and Assessment component of the lab.

Possible projects in LLTA might include:

- **Promoting proficiency through meaningful feedback** projects would involve understand user needs, consultation with the language learning literature for insights into how best to meet those needs, and the application of data gathered from both to the development of prototypes of meaningful interpretation layers of speech scoring data.
- **Supporting fluency by practicing confidently** projects would involve collecting and analyzing user feedback, conducting analyses of beta tester usage data within the app, and making concrete recommendations for optimization of existing features and/or development of new features in the app.
- **Meeting the needs of young English-language learners** projects will involve the ideation, design, and development of AI capabilities, product concepts, and prototypes that support young learners as they enter and progress in their language learning journey.

Contact

For more information, [contact us via email](#).