
GLOBALINK RESEARCH INTERNSHIP AWARD DISBURSEMENT INFORMATION AND PLACEMENT TERMS AND CONDITIONS

Dear Nishanth Rajkumar,

Congratulations! You have been selected by Mitacs and Kim Adams from University of Alberta – Edmonton to receive a 2021 Globalink Research Internship award. This award is jointly funded by Mitacs and the All India Council for Technical Education (AICTE). You are therefore invited to participate in a research project at University of Alberta – Edmonton. Pursuant to an agreement with University of Alberta – Edmonton, Mitacs will administer your funding grant.

Mitacs Globalink Research Internship is a competitive program that pairs top-ranked international students with specific research expertise with faculty at Canadian academic institutions for a twelve (12) week research project of mutual interest between May and October. You have been selected by your Canadian host faculty project leader due to your background and skills in the research area and the unique contribution you will be making to the research during your internship. The skills required for your role (as described in the research description below) were found to clearly match your skills set, education, and research experience.

Research internship details

University/Institution:	University of Alberta – Edmonton
Host Professor:	Kim Adams
Research Project Title:	Brain Controlled Robot for Children who have Disabilities_Clone
Research Description:	Children who are living with severe neurological disability can lack effective voluntary control of movement, resulting in lost developmental opportunities. Brain computer interfaces (BCI) could enable them to communicate and control their environments to achieve greater independence

This is an interdisciplinary project, involving engineering, health, and social sciences. We are developing a hospital-based research program to use BCI technologies with patients and families who could directly benefit from them. We are applying multiple-input access methods (including switches, eye gaze, brain signals) to control toys, robots and other assistive technologies. With these tools, children who have disabilities can access play and learning opportunities and develop associated cognitive, social and other skills.

Students working on this project would work with front-line clinical staff to develop a BCI laboratory, and BCI Training program. A screening program will be validated to determine eligible participants, and customized training based on the goals and abilities of the individual will be developed.

There will be two project areas: 1) investigate if popular videogames can be controlled with BCI to advance leisure, socialization and training for independence applications in children. 2) investigate if available consumer environmental controls (i.e. Homekit, Google Home etc.) can be controlled with BCI to advance independence and participation in daily activities

During your internship, you will be:

- The technical student should
- be enrolled in a degree in engineering, computer science, or other related disciplines
 - a background in brain controlled-interfaces is encouraged (control systems an asset)
 - have experience with C programming languages and Matlab

The technical student will develop and trial the technology in-lab, and run the technology during trials with children who have disabilities. The student will document technical specifications for the next phases of the project.

The health studies student should be:

- enrolled in a degree for Occupational Therapy Nursing or Psychology
- have experience and a passion for working with children

The health student will develop various playful activities that include the targeted skills. The student will pilot test the activities using the robot in order to inform how the protocol should be carried out (e.g., how long the sessions can be based on children's ability level).

The students will participate in interdisciplinary team meetings for planning and discussion of results. There will also be bi-weekly project implementation progress meetings with Adams. The students will have meetings and lab-trials at the Glenrose Rehabilitation Hospital. This will facilitate exposure to both the academic environment and an interdisciplinary assistive technology team that works directly with children who have disabilities. The students will have opportunities to engage with front line staff in discussions, to present research results, and for authorship on dissemination activities.

Duration of Research:

12 weeks, to begin between May 1 and July 31, 2021 (unless otherwise approved by Mitacs) and end no later than October 31, 2021 (unless otherwise approved by Mitacs). Shortened durations must be agreed upon with the supervisor and Mitacs. Durations of more than twelve (12) weeks will not be permitted.

Hours of Work:

Minimum of forty (40) hours per week.

Due to the travel and public health restrictions, Mitacs is carrying out the 2021 Globalink Research Internship program virtually. The funding and pre-internship logistics will be adjusted accordingly. You will be expected to follow all clauses as laid out in Appendix A: Terms and Conditions – Obligations of the Interns.

This letter cannot be used for purposes of travel.

We look forward to welcoming you as a temporary member of the research team at University of Alberta – Edmonton.

Acknowledgements:

Mitacs Globalink gratefully acknowledges the financial support of the Government of Alberta, the Government of Canada as well as our partner in India, All India Council for Technical Education (AICTE).

Sincerely,



Petra Kukacka
Director, Program Operations

Enclosure:

- Appendix A: Terms and Conditions

Appendix A: Terms and Conditions

Please note that your funding is provided in accordance with the All India Council for Technical Education (AICTE), India.

Obligations of Mitacs

a) Financial arrangements

Mitacs will be responsible for providing the following:

1. A living stipend of Can\$900
2. A stipend of Can\$300 for any student fees charged by your Canadian host institution (student fees above Can\$300 are the responsibility of the Globalink research intern)

Under Mitacs's funding policy, we are unable to provide you with any funds in advance of your internship start date. Interns will be responsible for providing payment details following Mitacs's instructions in order to receive funds. Funds transferred outside of Canada may take four to six weeks to arrive; you must therefore have at least one month of spending cash and/or credit available from the start of your internship.

b) Local arrangements

Since this internship will be carried out virtually, Mitacs does not take into account expenses for accommodation, local travel, etc.

Mitacs will assume responsibility for the following aspects of your local arrangements:

1. Professional skills courses and/or industry and/or government meetings delivered virtually to enhance the experience of your research internship
2. Provision of a Mitacs-approved Globalink Mentor for you to consult with virtually about issues and questions that arise during your internship
3. Other virtual activities at the sole discretion of Mitacs.

Obligations of the Globalink Research Intern

1. As COVID-19 continues to impose public health concerns and travel restrictions, this award is contingent on the permission of the host university, host professor, your home university, and funding organizations (as applicable). In circumstances where virtual interactions cannot be arranged to support your project, this Award Letter will be terminated and you will be reimbursed any eligible costs provided you have followed Mitacs's instructions in preparation for your internship and that such costs have not been incurred against the advice of Mitacs.
2. Interns are required to participate in the program for 12 weeks, working a total of 40 hours per week for their host professor on their research project, unless otherwise arranged with the Canadian faculty member and approved by Mitacs. If the duration of your internship needs to be shortened, contact Mitacs at helpdesk@mitacs.ca.
3. As a key component of the Globalink program, Mitacs may offer program participants opportunities to engage in professional skills courses, industry and government relations meetings, and other networking opportunities to supplement your research experience. Mitacs will, whenever possible, schedule meetings and courses in such a way as to minimize the impact on your primary focus, that of contributing to the research project. You are encouraged to participate in such Mitacs-arranged meetings and courses, and your host professor will be asked to support this component of the Globalink program. You are normally expected to dedicate 40 hours per week to your research project and will need to make arrangements with your host professor regarding time away from your research project.
4. Interns are expected to complete a final survey administered by Mitacs to rate their experience of the program.
5. Interns are required to check with their home university regarding any conditions or actions involved with participating in the program.

● Montréal, QC
405 avenue Ogilvy
Bureau 101
Montréal, QC H3N 1M3

● Ottawa, ON
56 Sparks Street
Suite 300
Ottawa, ON K1P 5A9

● Toronto, ON
Banting Institute, University of Toronto
522 – 100 College Street
Toronto, ON M5G 1L5

● Vancouver, BC
Suite 301 – 6190 Agronomy Road
University of British Columbia
Vancouver, BC V6T 1Z3