

INSTRUCTIONS

- Please make sure you are using the latest version of this form posted on **www.mitacs.ca/en/programs/accelerate/apply-now**
- Please do not modify or reformat this form in any way. A modified form will result in a delay in the internship evaluation process.
- Detailed information on how to write your proposal can be found [here](#).
- Send your draft proposal to your Mitacs Business Development Representative **prior** to obtaining all signatures and submitting.
- The proposal should be written and submitted **at least eight (8) weeks prior to the planned start date of the internship**.
- The start date of the internship has to be **after** scientific approval and the **receipt** of the partner funds at Mitacs.
- Partner funds can be sent directly to Mitacs prior to approval to expedite the process or upon approval.
- If applicable, proposals with a not-for-profit partner must seek partner and project eligibility approval before proceeding. Please submit a [pre-assessment](#) form **BEFORE** submitting your application (see section 2.7).
- If applicable, [conflict of interest declarations](#) must be received by Mitacs **before** submitting your application (see section 4.1/4.3).
- If you cannot see the items listed in the drop downs, please refer to the Appendix A: Options and type the corresponding answer on the space provided.

Please note:

If required, your **Mitacs Business Development Representative** can assist you with:

- Identifying your Office of Research Services (ORS) representative.
- Facilitating non-disclosure agreements or intellectual property arrangements.
- Assessing the eligibility and completeness of the proposed research.

APPLICATION CHECKLIST

A complete internship application package must include the following :

- The proposal application **completed and signed** by all parties. The memorandum (see Section 7) with signatures must be submitted as a scanned PDF file.
- List of six external experts, arms-length reviewers and their contact information
- Intern(s) CV (a [CV template](#) is available on the Mitacs website)
- Excel budget if this is an Accelerate cluster proposal
- Any supplementary documents (as applicable)

*** An incomplete application or a modified form will result in a delay in the internship evaluation process.**

For more information, contact a **Business Development representative** (www.mitacs.ca/en/contact-us/business-development).

The intent of this research project is to develop an interactive tool that can be easily installed in partner stores that sell the Rubix Pearl. The goal is to promote the toy to existing customers of the store using digital technologies. The Rubix Pearl is a rounded puzzle that is solved by rotating compartments of the sphere until all elements that make up each of the six sides create a single colour. Modifications to the toy will be made to allow it to act as a digital input based on the physical movements of the toy. Sensors will be housed internally, allowing a digital reading of the movements.

Objective 2

The intended outcome of this research will be executed by creating screen-based content that will be controlled by the modified Rubix Pearl. The physical Pearl that acts as a controller will have no colours on it. Rather, the user is expected to look at a digital coloured version on the screen in order to solve the puzzle. By spinning the sides of the real-world puzzle, the user can affect the virtual image before them. The Rubix Pearl installation screen is motion censored so when customers walk by, the Rubix Pearl on the screen will automatically begin to solve the puzzle.

Objective 3

The final outcome of this stage will be focused on the installation and design of the Rubix Pearl kiosks in Walmarts. The way in which the Rubix Pearl is presented will attract Walmart customers to interact with the kiosk by its use of motion-sensory appeal. The kiosk will emit sounds, coloured lights, and movement that will entice customers to interact with the Rubix Pearl. By allowing children to interact with the Pearl before their parents purchase the product, parents will be able to see their child’s positive reaction when engaging with the Rubix Pearl, thereby parents will be more inclined to purchase the product.

5. Details of internships or subprojects:

For each intern or subproject, provide the following mandatory information:

- a. **Name of intern.**
William Hall
- b. **Specific objectives of the internship or subproject.**
To start, I will research and develop a system using a variety of internal sensors to use the physical movements of the Rubix Pearl as a method of digital input. The following step is the instillation process of implementing Rubix Pearl in Walmart’s across Canada. The final step is to attract Walmart customers to the Rubix Pearl kiosk by the use of sensory appeal.
- c. **Methodologies**
In order to achieve the above, extensive research will need to be completed in the following manner; toy consumer analytics, how participants brains react to actively engaging with physical, puzzle gadgets, kiosk instillation budget and time, and lastly, overall timeline for the three objects. Also, a project manager will be joining the team to overlook all designs and spendings.
- d. **Timeline.** We suggest using a Gantt chart to provide a timeline showing which task will be done when to achieve each objective.

Objective 1		
	Objective 2	
		Objective 3
Months 2-6	Months 8-14	Months 16-30

- e. **Expected deliverables.**
The intern will not only deliver a written report exploring interactive digital advertising in-store, but also a functional prototype of the installation.

f. **Benefit to the intern.**

The intern will develop real-world skills through technical exploration, and will develop a specialized understanding of using interactive installations for marketing purposes. The allotted time dedicated to both partner and academic interaction will allow the Intern to manage a balanced schedule that permits hands on experience and the research needed to implement Rubix Pearl Interactive. The academic research will be beneficial in the trial and error aspect of creating the functioning prototype that suits the needs and wants the targeted consumers.

g. **Interaction**

% of partner interaction: 50 % + % of academic interaction: 50 % = 100%

h. **Justification** of interaction (if applicable).

N/A

i. **Partner Interaction.**

Partner interaction will aid in the hands on experience which includes face-to-face communication with Industry professionals. The actual development of the interface will take place on-site, using manufacturing tools and an existing version of the product provided by the company.

6. **Relevance** to the partner organization and to Canada:

Rubix Pearl Interactive's sole distribution at the Walmart Franchise will be another factor that draws potential consumers into the store. Through this exclusive distribution it will reduce competition in surrounding areas and cause a rise in sales for the Walmart Franchise. This creation that combines physical and digital play will be a groundbreaking innovation that Canada can claim proudly as its own.

7. **Project economic orientation (if applicable):**

N/A

8. **Relationship (if any) to past/other Mitacs Accelerate internships, Mitacs Elevate fellowships, or current applications in submission to any Mitacs program:**

N/A

9. **References:**

Samuel Jules - Project Coordinator
TIFF Kids digiPlayspace
350 King St W, Toronto, ON M5V 3X5
(416) 636-7352
samueljules@digiplayspace.tiff.ca

Shelby Silverstein - General Manager
DEMHUB
2874 Hillcast Lane E, Toronto, ON M56 6D9
(647) 336-7892
s.silverstein@demhum.ca

Susan Stone - Camp Director
Upper Canada College Summer Camps
200 Lonsdale Rd, Toronto, ON M4V 1W6

(905) 993-9493

susanstone@uccsc.on.ca

Kathleen Pierre Adams - Undergraduate Thesis Supervisor

Ryerson Educator

350 Victoria St, Toronto, ON M5B 2K3

(416) 979-5000

kathleenadams@ryerson.ca

3. Declarations

1) Will the proposed research be taking place outside of the lab or normal business environment?

Yes: No:

If yes, please complete the following section to indicate what (if any) impact there may be on the environment.

a) Main characteristics of the location

b) Principal activity(ies): for each activity, list the environmental elements affected.

c) Are authorizations, permits, or licenses required to undertake any activity during the internship?

Yes No

If yes, please list and include copies with your application.

2) Does the proposed research involve living human subjects (including conducting interviews) or human remains, cadavers, tissues, biological fluids, embryos, or fetuses?

Yes: No:

If yes, the proposal must be approved by the participating University Research Ethics Board, and a valid Ethics approval is required for the duration of the research project. Access to funding may be denied for projects that do not have ethical approval.

Please note: Mitacs may request a copy of the report to ensure compliance.

3) Does the proposed research involve animal subjects?

Yes No:

If yes, the proposal must be approved by the participating University Animal Care Committee, and a valid approval from the committee is required for the duration of the research project.

Please note: Mitacs may request a copy of the report to ensure compliance.

4) Is a biohazards review required?

Yes No:

If yes, the necessary review/report must be conducted in accordance with your university's policies, and a valid biohazards approval is required for the duration of the research project.

Please note: Mitacs may request a copy of the report to ensure compliance.

5) Have any participants declared a Conflict of Interest (COI) as part of this application?

Yes No:

If yes, please attach the signed conflict resolution letter.

6) How did the participants first hear about Mitacs?

Please mark with (x)

Notification from your university department or at the university (bulletin board posting, email communication, newsletter, university website)	<input type="checkbox"/>	From the university's graduate studies offices	<input type="checkbox"/>
From a representative at the sponsor company	<input type="checkbox"/>	From a professor at the university	<input checked="" type="checkbox"/>
Notification from Mitacs (e-mail newsletter, social media)	<input type="checkbox"/>	From a Mitacs representative	<input type="checkbox"/>
Other (please describe):			

4. Participants

Duplicate relevant section(s) as needed for multiple interns or supervisors.

4.1. Academic supervisor:

Name:	Alex Ferworn
University:	Ryerson University
Department:	Master of Digital Media
Address (at university):	350 Victoria Street
City, Province:	Toronto, ON
Postal code:	M5B 2K3
Phone:	416-979-5000 ext 2858
Email:	afeworn@gmail.com

4.1.1. Is the academic supervisor**:

An owner or a co-owner of the partner organization:

Yes___ No X

A relative of an owner or co-owner of the partner organization:

Yes___ No X

An employee of and/or a participant in the day-to-day management of the partner organization:

Yes___ No X

If **yes** to any of the above, please [click here](#) to complete the **Conflict of Interest Declaration** and send it to accelerate@mitacs.ca **BEFORE** submitting your application.

For any additional academic supervisors copy and paste Section 4.1. below:

4.2. Partner organization:

Legal name:	XYZ Toys Incorporated
Operating name (if different):	XYZ Toys
Contact name:	Kyle M. Schuyler
Position:	Head of Marketing
Department:	Marketing
Address:	244 Queen Street East
City, Province:	Toronto, ON
Postal code:	M5A 1S3
Phone:	647-555-4908
Email:	KSchuyler@XYZ.ca
Website:	XYZ.ca
Partner size (number of employees):	50 to 99
Legal status:	For Profit Canadian Private Corporation

4.2.1. NAICS Code (First three digits): 414

[Click here for a list of North American Industry Classification System codes.](#)

For any additional partner organization copy and paste Section 4.2. below:

4.3. Intern(s) identified:

4.3.1. Intern #1 information

Name:	William Hall
Degree program during internship (masters/PhD/PDF):	Master
Expected year of graduation:	2017
If PDF, indicate mm/yy PhD received:	
University:	Ryerson University
Department:	Master of Digital Media
Address at university:	350 Victoria Street
City, Province:	Toronto, ON
Postal code:	M5A 1S3
Phone:	416-555-4980
University email:	whall@ryerson.ca
Alternate email:	whall@gmail.com
Citizenship:	Canadian
Gender:	Male

4.3.2. Conflict of interest. Is the intern:

An owner or a co-owner of the partner organization:

Yes___ No X

A relative of an owner or co-owner of the partner organization:

Yes___ No X

An employee of and/or a participant in the day-to-day management of the partner organization:

Yes___ No X

If **yes** to any of the above, please [click here](#) to complete the **Conflict of Interest Declaration** and send it to accelerate@mitacs.ca **BEFORE** submitting your application.

4.3.3. Demographic information. *OPTIONAL*

Please indicate (x) if you are:

Francophone:	<input type="checkbox"/>	A person with a disability:	<input type="checkbox"/>
Aboriginal:	<input type="checkbox"/>	First in your family to attend university:	<input type="checkbox"/>

Social Media: Please provide usernames if you wish to connect with Mitacs by social media:

LinkedIn:	linkedin.com/in/williamhall
Twitter:	@williamhall
Facebook:	facebook.com/williamhall

For any additional interns copy and paste Section 4.3. below:

4.4. Intern(s) to be determined (TBD):

TBD#1

Degree program during internship (Master's, PhD, PDF):	Master
University:	Ryerson
Department:	Digital Media

For any additional TBD interns, copy and paste Section 4.4. below:

5. Funding, Budget and Invoicing

- For **Accelerate standard** projects, please complete sections 5.1 to 5.4.
- For **Accelerate cluster** projects involving a minimum of three (3) interns, at least six (6) four-month internship units, and a minimum of one (1) eligible partner, please complete section **5.3** and **5.4**.only AND the Accelerate Cluster Budget Excel spreadsheet.

1. Funding summary

For each four-month internship unit, the partner must contribute \$7,500* and Mitacs will match with \$7,500.

Source	Number of Internships	Amount (Number of internships* x \$7,500)
Total Mitacs contribution (\$7,500 per internship)	1	\$7500
Total Partner contribution* (\$7,500 per internship)	1	\$7500
Total project award (\$15,000 per internship)	1	\$15000

* The partner's contribution is subject to tax.

2. Budget

For each four-month internship unit, the intern stipend must be a minimum of \$10,000 and the research costs must be a maximum of \$5,000.

5.2.1. Stipend expenses – details per internship unit (add extra table lines as needed)

Academic Supervisor Name	Intern Name	Estimated Start date (Month, Year)	Stipend Amount (min. \$10,000 per internship unit)
Alex Ferworn	William Hall	April, 2017	\$10,000
			\$
Total Stipend (A):			\$10,000

5.2.2. Research costs, e.g. equipment, travel, conference (add extra table lines as needed).

Research Costs	Value
1. Prototypes	\$ 1500
2. User-testing	\$ 600
3. Networking Events	\$ 550
Total research costs (B) - which cannot exceed \$5,000 per internship unit:	\$2650

Total expenses [(A + B) = total project award]	\$ 12650
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3. Additional resources

Please indicate if the partner will provide the intern with any of the following additional resources and indicate their estimated value:

Additional resources	Amount
Office supplies / stationery	\$ N/A

Use of equipment or specialized equipment	\$ 75
Access to relevant company material, personnel	\$ 500
Industrial partner supervision	\$ 1000
Other, please specify:	\$ N/A

4. Invoicing Partner funds

Please describe any applicable **invoicing requirements** (vendor setup, PO, etc.):

Address same as filled in Section 4.2.

If invoicing address different than Section 4.2, please fill out the following:

Please note: Partner contributions must be received by Mitacs BEFORE any funds are awarded to the university. Costs can only be incurred after scientific approval of the proposal and the receipt of the partner funds at Mitacs.

Have these funds been leveraged against other federal or provincial programs?

Yes ___ No (X)

If yes, please provide details:

4.1. Were partner funds sent, as an exception, to the university:

Yes ___ No (X) If yes please confirm that:

(a) Is there a research agreement in place with the university that governs the use of these partner funds?

Yes ___ No (X)

If yes please speak with your BD representative, fill out the *confirmation of transfer of partner funds document*, and submit that document with your completed application

(b) ORRS/UILO agrees to send these funds to Mitacs

Yes ___ No (X)

University account number:

(c) The partner agrees by signing this application that the funds can be forwarded

Yes (X) No ___

Name of the consenting partner representative William Hall

(d) University contact to receive Mitacs invoice

Name: Ryerson University

Department: Master of Digital Media

Email: digitalmedia@ryerson.ca

(e) Is the GST or HST, and QST (if applicable) to be included with invoice to university?

Yes ___ No (X)

If no, tax(es) will be invoiced directly to the industry partner.

5.4.2. Payment options

Please select (x) the preferred payment option:

Full project payment: One invoice for full project contribution to be paid in full on receipt

()

Installments: If you choose to be invoiced in installments, please note that an installment schedule will be created (X) by Mitacs staff and up to three invoices per year will be sent to your attention 60 days before the start date of the first internship of the installment

- Invoices will be issued for a minimum of one internship unit (\$7,500 for an Accelerate Standard project OR \$6,000 for an Accelerate Cluster project) and must be paid in full, partial payments of invoices will not be accepted.
- The partner's contribution is subject to tax.

6. Suggested Reviewers

Please provide the names and contact information of at least **SIX (6) arms-length** reviewers.

An arms-length reviewer must:

- Be a recognized expert in the research topics and technical aspects covered by the proposal;
- NOT be from the same university as the intern(s) or the academic supervisor(s); and
- NOT have had any collaboration with the intern(s) or the academic supervisor(s) or the partner(s) during the past five (5) years or planned for the near future.

Please note that neglecting to suggest reviewers who qualify as arms-length will delay the review of your application.

Reviewer 1:

Name:	Sheila Hodges
University:	McMaster University
Department:	Computing and Software
Email:	SheilaHodges@mcmaster.ca

Reviewer 2:

Name:	Wendell Hopkins
University:	University of Toronto
Department:	School of Information Studies
Email:	WendellHopkins@utoronto.ca

Reviewer 3:

Name:	Stacy Mack
University:	Harvard University
Department:	Sociology
Email:	SMack1@Harvard.edu

Reviewer 4:

Name:	Derrick Wilkerson
University:	Massachusetts Institute of Technology
Department:	Science, Technology, and Society
Email:	DerrickWilkerson@MIT.edu

Reviewer 5:

Name:	Ada Tucker
University:	Massachusetts Institute of Technology
Department:	Science, Technology, and Society
Email:	AdaTucker@MIT.edu

Reviewer 6:

Name:	Kelvin Daniel
University:	University of Toronto

Department:	Engineering
Email:	KelvinDaniel@utoronto.ca

Potential competing interest. *OPTIONAL*

Include potential reviewers whom Mitacs should **not** contact due to a potential competing interest in the proposed research.

Name:	
University / Research Group:	

Name:	
University / Research Group:	

7. Mitacs Accelerate Memorandum

The participants listed below confirm that the information presented accurately reflects their intention to apply to the Mitacs Accelerate program. The participants have also agreed to set in place an internship based upon the attached proposal. It is understood that the partner organization contribution shall be provided to Mitacs Inc. prior to commencement of the internship; in the event that the sponsor organization funds are at the university, the university shall forward these funds to Mitacs. Upon scientific approval, Mitacs shall forward the funds to the university as a research grant to the supervising professor, and the internship stipend will be paid to the student by the university from the grant. Costs associated with this proposal as outlined in the budget can only be incurred after scientific approval of the proposal.

Mitacs is unable to assume liability for any losses including—but not limited to—accidents, illness, travel, or other losses that may occur during the internship period. All undersigned parties agree that they are responsible for ensuring that they have appropriate insurance and meet any university policies regarding health, safety, and travel preparation requirements. All parties also agree that the intern will provide Mitacs with a final report and that all participants will complete an exit survey within one month of project completion.

All parties involved with Mitacs Accelerate are bound by the standard intellectual property (IP) terms of the university where the intern is enrolled; except where intellectual property is covered by separate agreements to which the university and the sponsor organization are parties and that are active during the dates of the internship. By signing this memorandum, you are acknowledging that you agree to the terms of the university where the intern is enrolled. University-specific IP policies regarding Accelerate internships can be found at [Accelerate Policies and Procedures](#).

The participants listed below agree that Mitacs can disclose the provided personal information included in this proposal (e-mail, LinkedIn, Twitter, Facebook, etc.) to the program's funding partners and that Mitacs can use them for the purpose of communication and to evaluate the program and its outcomes during and after participants' program tenure. The participants also agree that Mitacs will post the title of the project, the public project overview, the name of the partner(s) organization(s), the name of the intern(s), the name of supervisor(s) and the involved university on www.mitacs.ca/en/projects and may be used by Mitacs to publicize Mitacs Accelerate. Mitacs Privacy Policy can be found at www.mitacs.ca/en/privacy-policy.

Internship participants (intern, supervising professor, and partner) further agree to the following addendum(s):

Mitacs does not require, inspect, or enforce any additional terms as outlined by participants in the above addendum.

7.1. Title of the Project:

Rubix Pearl Interactive

7.2. Public Project Overview:

Using simplified language understandable to a layperson; provide a general, one-paragraph description of the proposed research project to be undertaken by the intern(s) as well as the expected benefit to the partner organization. (100 - 150 words)

Rubix Pearl Interactive will centre around research and development of a toy made using the pre-existing Rubix Pearl. This project will allow customers of a store to play in the digital world using physical movements. By twisting and turning the sides of a real puzzle sphere, users can control a virtual image on a screen before them. The intended outcome is to use digital technology to attract Walmart customers to the Rubix Pearl in-store, while promoting mixed-reality youth play.

7.3. Participant Signatures:

Please sign, scan and save in PDF format

Intern:

Name:	William Hall	
Department:	Master of Digital Media	
University:	Ryerson University	
Signature:		Date:

Academic Supervisor:

Name:	Alex Ferworn	
Department:	Master of Digital Media	
University:	Ryerson University	
Signature:		Date:

Partner Organization:

Name:	Kyle M. Schuyler	
Department:	Marketing	
Title/Position:	Head of Marketing	
Organization:	XYZ Toys Inc.	
Signature:		Date:

University Office of Research Services Representative:

Name:	Bruno Lessard	
Title/Position:	Expert in Interactive Media Arts	
University:	Ryerson University	
Signature:		Date:

For any additional participants include corresponding details and signature line below:

Appendix A

Please delete if not applicable

Drop Down - Options

Please refer to the drop down of the section, and type the corresponding answer on the space provided.

1.5. Academic discipline:

- Business
- Computer Science
- Earth Sciences
- Engineering
- Life Sciences
- Mathematical
- Sciences Social Sciences, Arts & Humanities
- Physical Sciences

1.6. Project priority sectors:

- | | | |
|------------------------|--|--------------------------------------|
| - Aboriginal Affairs | Entertainment & Media | Natural Resources |
| Advanced Manufacturing | Environmental Science & Technology | New & Digital Media |
| Aerospace | Finance & Insurance | Ocean Tech |
| Agriculture & Food | Forestry | Oil & Gas |
| Aquaculture & Fishing | Green/Alternative Energy | Pharmaceuticals |
| Automotive | Health and Related Sciences & Technology | Public Service, Policy, & Governance |
| Biotechnology | Information & Communications Technology | Sustainability & the Environment |
| Clean Technology | Life Sciences (not health) | Technology |
| Commercial Services | Manufacturing & Construction | Tourism |
| Construction | Mining | Transportation |
| Education | Nanotechnology | Water |
| Energy & Utilities | Natural Gas | Other (please describe) |

1.8. List of Participants:

Partner Legal Status:

- For Profit Canadian Private Corporation
- Crown Corporation
- Not for Profit Canadian Corporation

4.2. Partner organization:

Partner size (No. employees):

- 1 to 49
- 50 to 99
- 100 to 499
- 500 and higher

Legal status:

- For Profit Canadian Private Corporation
- Crown Corporation
- Not for Profit Canadian Corporation

4.3. Intern(s) identified:

4.3.1. Citizenship:

- Canadian:
- Permanent Resident:
- Foreign:

Gender

- Female
- Male