# **Information & Consent Form**

#### Date:

# **Title of Project:**

Investigation of user's level of interest while interacting with the Sentient Canopy interactive art sculpture

## **Faculty Supervisors:**

Dr. Dana Kulić
Department of Electrical and Computer Engineering dana.kulic@uwaterloo.ca
519-888-4567 ext. 37260

Dr. Robert B. Gorbet
Department of Knowledge Integration
rbgorbet@uwaterloo.ca
519-888-4567 ext. 33489

#### **Student Investigator:**

Matthew Tsz Kiu Chan
Department of Electrical and Computer Engineering
matthew.chan@uwaterloo.ca

# **Study Overview**

My name is Matthew Tsz Kiu Chan and I am a MASc student working under the supervision of Dr. Dana Kulic in the Adaptive Systems Laboratory in the Department of Electrical and Computer Engineering and Dr. Rob Gorbet in the Department of Knowledge Integration, at the University of Waterloo.

You are invited to participate in a study that investigates users' level of interest while interacting with the new series of interactive art sculptures named *Sentient Canopy*, which is produced in collaboration with the Philip Beesley Architect Inc. (PBAI) in Toronto, ON. This study is for my Master's thesis and is conducted in collaboration with PBAI. Similar sculptures have been displayed in many venues in different countries in the past. For a list of previous installations, please visit <a href="http://philipbeesleyarchitect.com/sculptures">http://philipbeesleyarchitect.com/sculptures</a>.

#### What You Will Be Asked to Do

Participation in this study involves interacting with the art sculpture. While you are interacting with the sculpture, you will be asked to fill out a short questionnaire regarding your interest level whenever you hear a signal. You are free to roam around the studio and interact with the sculpture as you like. There is not any specific prescribed interaction and you are free to choose how you want to interact with the sculpture. At the end of the study, you will return all the completed questionnaires in an envelope and you will be asked to fill out

another short questionnaire about your overall experience. Please see attached "Study Procedures" sheet for details.

#### **Participation**

Participation in this study is voluntary and it will take approximately 30 minutes of your time. You may decline to answer any questions presented during the study if you so wish. Further, you may decide to withdraw from this study at any time by advising the researcher, and may do so without any penalty.

## **Personal Benefits of the Study**

There are no personal benefits to participation.

### Risks to Participation in the Study

There are no known or anticipated risks/stressors to the participants as a result of taking part in this study. The interactive art sculptures developed by Philip Beesley Architect Inc. have been exhibited in more than 10 countries where thousands of people have visited the art sculptures. The sculptures are made of soft and lightweight material and actuated with low power actuators. An actuator is a device that converts energy, such as electricity, into motion, light, and sound. This new series of interactive art sculptures does not pose greater risk of physical harm than what existed in previous installations.

#### Confidentiality

All information you provide is considered completely confidential; indeed, your name will not be included or in any other way associated, with the data collected in the study. Furthermore, because the interest of this study is in the average responses of the entire group of participants, you will not be identified individually in any way in any written reports of this research. Paper records of data collected during this study will be destroyed after they have been digitized. The converted electronic data will be kept for 20 years on a secure computer, to which only researchers associated with the Adaptive Systems Laboratory have access. This data may be additionally used for subsequent secondary data analysis comparing user responses to various interaction strategies, however, your name and identity will not be obtainable from the stored data.

# **Questions and Research Ethics Clearance**

If after receiving this letter, you have any questions about this study, or would like additional information to assist you in reaching a decision about participation, please feel free to ask the student investigator or a faculty supervisor listed at the top of this sheet.

I would like to assure you that this study has been reviewed and received ethics clearance through a University of Waterloo Research Ethics Committee. However, the final decision about participation is yours. If you have any comments or concerns resulting from your participation in this study, please contact Dr. Maureen Nummelin, the Director, Office of Research Ethics, at 1-519-888-4567, Ext. 36005 or <a href="maureen.nummelin@uwaterloo.ca">maureen.nummelin@uwaterloo.ca</a>.

Thank you for your interest in our research and for your assistance with this project.

# **Consent of Participant**

I have read the information presented in the information letter about the study being conducted by Matthew Tsz Kiu Chan under the supervision of Dr. Dana Kulic in the Adaptive Systems Laboratory in the Department of Electrical and Computer Engineering and Dr. Rob Gorbet in the Department of Knowledge Integration at the University of Waterloo in collaboration with Philip Beesley Architect Inc. in Toronto, ON.

I have had the opportunity to ask any questions related to this study, to receive satisfactory answers to my questions, and any additional details I wanted. I am aware that I may withdraw from the study without any penalty at any time by advising the researchers of this decision.

This project has been reviewed by, and received ethics clearance through a University of Waterloo Research Ethics Committee. I was informed that if I have any comments or concerns resulting from my participation in this study, I may contact the Director, Office of Research Ethics, at 1-519-888-4567, Ext. 36005.

with full knowledge of all foregoing, I agree, o	or my own free will, to participate in this study
Print Name	
Signature of Participant	

# **Study Procedures**

- In the envelope that you have received, you will find a stack of questionnaire cards that look like the image to the right.
- You are free to walk around the studio and interact with the art sculpture. Periodically, a tone will sound in the studio. When you hear the tone, please take one card out. You are expected to hear a sound around every 3 to 5 minutes.
- 3. When the tone sounds, the researcher will display a number; and write down the number in the first box.
- What number is being displayed right now? How interesting do you think the behaviour of the sculpture is right now? 1 2 3 4 5 Very neutral interesting interesting What is the number taped on the floor, closest to your current location? 2 1 3 4 5 6 7 9 10 11 12
- 4. Report how interesting you think the behaviour of the sculpture is at that moment by circling one of the numbers from 0 to 9 under the second question.
- 5. Look down to the floor. There should be a number right below or near where you are standing. Please circle the number that is closest to where you are standing under the third question.
- 6. After that, you can return the completed card to the envelope and continue walking around the studio and interacting with the sculpture.
  - 7. When you leave or when the staff signal the end of the showing, please return the envelope containing the questionnaire cards to the desk where you got the envelope from.
- 8. You will then be asked to fill out a survey on your overall experience and your knowledge of machine learning.
- 9. At last, you will be given a debriefing letter with more information about the study.