**AdRIC**

**Advanced Research Institute for Informatics Computing and Networking**

Student Application Form for Research Center Usage

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Application for: | * 1st | * 2nd | * 3rd | AY: \_**2016-2017**\_\_\_\_\_\_\_\_ |

Thesis/Project Title: \_**Recognizing Reader’s Affect Using EEG Data**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Thesis Adviser/Project Head: \_**Ms Ethel Chua Joy Ong**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Thesis Level and Stage:

|  |  |  |  |
| --- | --- | --- | --- |
| *Level* | *Stage* |  |  |
| * *BS* | * *Thes1* | * *Thes2* | * *Thes3* |
| * *MS* | * *Proposal* | * *Final* |  |

Proponents (The first name should be the group leader.):

|  |  |  |
| --- | --- | --- |
| Name | Email Address | Mobile Number |
| 1. Kristine Ma. Dominique F. Kalaw | 1. kristine\_ma\_kalaw@dlsu.edu.ph | 1. 09278544201 |
| 2. | 2. | 2. |
| 3. | 3. | 3. |
| 4. | 4. | 4. |

Which Lab/Center do you wish to work in? (Please check only one)

|  |
| --- |
| * *CEHCI – Center for Empathic Human-Computer Interactions* |
| * *CAR – Center for Automation Research* |
| * *ComET – Center for Complexity and Emerging Technologies* |
| * *CeLT – Center for Language Technologies* |
| * *ICT4D – ICT for Development* |
| * *Game Lab – Game Development Laboratory* |
|  |

If your thesis/project is not under any the Research Centers/Lab mentioned above, which research area does it fall under? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Note: Kindly Attach one page project overview

Endorsed by: \_\_\_\_\_\_**Nathalie Rose Lim-Cheng**\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Center Head Date

Approval: **\_\_\_\_\_\_\_\_\_\_\_\_\_Ethel Chua Joy Ong\_\_\_\_\_\_\_\_\_**\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

CCS-AdRIC Director Date

**Compliance to Policy Agreement**

We, the undersigned, have read and agreed to abide by the Research Center / Professional Laboratory Usage Guidelines as stated below.

|  |  |  |
| --- | --- | --- |
| \_**Kristine Ma. Dominique F. Kalaw**\_  Signature over Printed Name |  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Signature over Printed Name |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Signature over Printed Name |  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Signature over Printed Name |

Research Center / Professional Laboratory Usage Guidelines

1. Students who wish to work at a Center should apply to AdRIC and renew applications at the beginning of each trimester. Approval of the application is endorsed by the Center Coordinator to the AdRIC Director.
2. Only those authorized to work inside the Center are allowed to enter the Center. Students are allowed to work at the Center until 10:00 pm. Students are not allowed to stay at the Center during Sundays and holidays, nor are they allowed to work overnight.
3. Students may bring their equipment to the Center, subject to the University’s existing rules on bringing equipment inside campus.
4. In case the door is locked, students may request the CT Lab Technician (who are stationed at G405-G407) to open the door for them.
5. Centers must be kept locked if no one is at the Center.
6. Good housekeeping should be observed at all times. All facilities and furniture must be used responsibly. Vandalism (i.e., willful and malicious destruction or infliction of damage on furniture, fixtures, equipment, software, and/or data belonging to the Center or its users), including the deliberate uploading and/or creation of computer virus, is prohibited and is subject to the rules as stated in the Student Handbook.
7. Eating and bringing of food and soft drinks are strictly prohibited within the student area.
8. Report immediately to the AdRIC secretary or Center Coordinator any malfunctioning of equipment, furniture and/or fixtures.
9. The Centers are designed to have a common student working area, meant to be shared by all authorized students.
   * 1. Students are not assigned to specific locations.
     2. Students may work at any unoccupied space at any time.
     3. Equipment should not be left in the Center, unless approved by the Center Coordinator.
     4. Do not leave things unattended.
10. Posting on the walls is strictly prohibited.
11. Glass panes have been provided for announcements and group discussions. In case of postings, please use damage-free adhesive tapes (e.g., Command Adhesive Strips) on the glass panes. These glass panes are to be shared by all student occupants, thus students must be considerate to others.
12. Discussions should be done in a manner that does not disturb other occupants of the Center. The level of noise must be kept to a minimum.
13. Any student found to be violating any of these guidelines will be suspended and/or banned from the Center.
14. All other policies and guidelines in the student handbook apply.

* Each Center may also have its own guidelines supplementing the ones stated here.
* Any matter, suggestions and/or complaints regarding the use of the Center and/or its occupants should be submitted in writing to the Advanced Research Institute for Informatics, Computing and Networking (AdRIC) Director at **ethel.ong@delasalle.ph**

**Reader Affect Model Overview**

The task of reading a selection elicits certain emotions from the readers. This emotion can have a profound effect on the reader’s comprehension and enjoyment of the selection. When integrated into a learning environment, the emotional states of the learners affect their motivation or de-motivation to use the system longer, thus increasing or decreasing their learning opportunities.

For computers to establish healthy relationships with their human users, they must be attuned to the emotional states of their users to provide affective responses appropriately. In this research, we want to investigate the affective response of the readers when reading a story through the use of emotion recognition devices. Affective responses include cognitive and emotional dimensions, and include the academic emotions engagement, confusion, frustration and distraction. This can find applications in intelligent tutoring systems that utilize an embodied conversational agent to understand difficulties of the reader and plan intervention activities to motivate and increase chances of learning.

Azcarraga and Suarez (2012) at the Center for Empathic Human Computer Interaction posits that “the expression of (academic) emotions may be manifested not only through facial expressions but also through other physiological reactions”. Their work investigates the various brainwave patterns and how these are associated with positive and negative emotions (confusion, interest, frustration, and boredom) of the academically-gifted learners.

The proposed research seeks to develop an affect model of readers in secondary schools (age 13-17) as they read a story text, and identify factors that trigger these emotions. The affect model will show the relationships among physiological signals, reader’s profile and academic emotion, and factors causing these emotions.

Specifically, the research aims to address the following questions:

* What elements of stories affect the readers?
* What types of academic emotions are elicited by the stories from their readers?
* What patterns of brainwave signals correspond to the different types of academic emotions that readers experience in the course of reading a story text?
* What applications can potentially find use for these emotional responses?

General Objective of the Research:

* To analyze the physiological signals collected from readers as they are reading stories in order to associate patterns of physiological signals to specific academic emotions.