

**Announcement of Research Assistant Position for the Project  
“Game design for desktop and mobile devices – Scalable user interfaces for educational games”**

We are looking for a highly motivated student who is interested in joining our research team as a research assistant. The research assistantship will be part of a larger project in the area of game-based learning. In this larger project we have been developing the web-based educational game OMEGA that supports learners in improving their meta-cognitive skills while playing. The game utilizes motivational techniques to encourage users to keep playing, uses learning analytics techniques to increase users’ awareness of their skill levels and progress, and personalizes the gaming experience to individual users and their preferences and skills.

OMEGA is a web-based system that is in the final development stage, and at the moment, is only designed for playing on desktop computers or laptops. The aim of this project is to design, implement and evaluate scalable user interfaces for OMEGA that allow players to use any device (especially mobile devices) to play the game. In addition, this research project aims at creating a set of guidelines and recommendations on how to make interfaces of educational games scalable for any device.

As a research assistant, you will be part of the research team and work under the supervision of Dr. Sabine Graf and Dr. Maiga Chang. Your main tasks will be to (1) design a general concept on how the main user interfaces of OMEGA can be adapted to different screen sizes, screen resolutions, platforms and input modes; (2) design a detailed concept for each user interface of the game showing how it will change for different screen sizes and screen resolutions as well as how it will work on different platforms and for different input modes; (3) implement the scalable user interfaces designed in step 2 as web-interfaces and develop two hybrid mobile apps (one for Android and one for iOS); (4) help with the proof-of-concept evaluation of the scalable user interfaces; (5) help with formulating the guidelines and recommendations on how to create scalable user interfaces; and (6) contribute to the dissemination of the research and project results by writing detailed documentation, updating the game’s website and participating in writing a scientific paper.

As there will be two research assistants working on this project, the tasks will be shared between the two research assistants based on their experience, skills and interests.

This position is a good opportunity to get involved in research activities and prepare you for other related research assistantship positions announced in future. Furthermore, if you are interested, it could later lead to your final undergraduate project or MSc essay/project/thesis.

**Details of the position:**

Start date: End of October / begin of November 2018  
Hours per week: Full-time (35 hour per week with an end date of December 24, 2018) OR  
Part-time (15-20 hours per week for about 120-160 hours overall with an end date of February 8, 2019)  
Location: anywhere in Canada  
Payment: \$16.87 per hour basic, which equates to about \$19.18 per hour including benefits

**Required Qualifications:**

- Strong programming skills, in particular with focus on web programming
- Strong experience in playing games at different platform
- Interest in the research topic
- Strong verbal and written communication skills
- Self-motivated with a strong work ethic
- Ability to work independently and in teams

**Assets and Preferences:**

- Programming experience and skills in HTML5, JavaScript, PHP, and MySQL
- Experience in mobile app development with HTML5

**How to apply:**

If you are interested in this research assistantship position, please send the following documents to Dr. Sabine Graf ([sabineg@athabascau.ca](mailto:sabineg@athabascau.ca)) and Dr. Maiga Chang ([maigac@athabascau.ca](mailto:maigac@athabascau.ca)) by **October 15, 2018**:

- Motivation letter
- A description about your previous and current experiences in terms of game playing and/or game development (max. 1 page)
- CV
- A copy of your transcripts

**Questions:**

Please contact Dr. Sabine Graf ([sabineg@athabascau.ca](mailto:sabineg@athabascau.ca)) and Dr. Maiga Chang ([maigac@athabascau.ca](mailto:maigac@athabascau.ca)).