CARLETON UNIVERSITY
POSITION DESCRIPTION

Part A	**OFFICER USE ONLY**
Employee Name:	1.Title: 2. Position No: **297312**
Title of Immediate Supervisor: Assistant Director, Digital Learning	3. Level: 09
Position Title: Immersive Technologies Coordinator	4. Evaluated by: Date:
Department: TLS – Digital Learning	5. Approved by: Date:

Part B
Position Summary:

Reporting to the Assistant Director of Digital Learning, the Immersive Technologies Coordinator provides professional technical expertise, guidance, and advice in the area of immersive technology for the delivery of technical activities within the Experiential Learning Hub, the Future Learning Lab, and virtual learning spaces at Carleton University.

The incumbent supports faculty and students with projects and experiences that include the creation and experiences related to immersive learning using various platforms, technologies, and equipment.

The position supports student learning, informal and formal training and instruction, and the development of proficiency of XR (Augmented, virtual and mixed reality) application development, 360° video, motion capture, immersive entertainment, and relevant platforms, tools and methodologies. This position supports and fosters communities of practices for XR in teaching and learning – both with students, instructors and researchers.

Flexible work hours may be required as the incumbent will be supporting courses and spaces that convene outside of the regular day shift. The incumbent is required to work the necessary hours (including outside of normal working hours) to correct problems and restore system(s) to good working order.

Part C
Primary Duties:

1. **XR Development** (30%)

   - Creates XR experiences using various tools and software that allow students to explore and create.
   - Leads projects and supervises production by others.
   - Supports students in producing screen-based, immersive or interactive animations, films, games and visual effects projects using a variety of tools and software equipment.
   - Supports students in the use of tools and techniques related to or supportive of the practices of virtual reality and visual effects, including:
     - o supporting head-mounted displays and associated software and hardware;
     - o using mobile devices and platforms to create, edit, tag and disseminate objects and scenarios;
     - o scripting and programming for interactive, immersive projects;
     - o accessing open-source code and libraries;
   - Integrates 2D and 3D media into 3D space; programming of interactivity for XR experiences.

2. **Consultation, Training, and Events** (30%)

   - Develops documentation, toolkits, and tutorials for XR hardware and software.
   - Designs and delivers XR workshops to the faculty, instructors, TA, students and staff.
   - Fosters and supports communities of practices and XR user groups (students, instructors, and researchers).
   - Provides formal or informal training sessions to students that may include demonstration, instruction of process/technique, and coaching with the development and proficiency of a particular skill, technique or process.
   - Contributes to the project planning and delivery of exhibitions and events within the University including:
     - o Consults with the faculty, instructors, students and events teams regarding technical requirements, availability of equipment and accessibility considerations;
     - o Provides technical support and assistance with equipment for other events and classes.
   - Facilitates workshops, directed learning, and collaborations with other technical areas.
   - Consults internally and externally with professionals and recognised practitioners and artists, and attends conferences and exhibitions to share and develop ideas, knowledge, and expertise that can be translated to support for learning and research activities.

3. **Project Support and Content Curation** (20%)

   - Maintains and supports XR computing stations, peripherals and photogrammetry equipment.
   - Purchases, updates and upgrades software in the Experiential Learning Hub and the Media Commons.
   - Identifies and helps integrates XR into courses to support learning.

- Researches and curates existing experiences for instructors and staff wishing to integrate XR into their work.
- Develops a system for tagging and retrieving various AR/VR/XR assets and experiences.

4. <u>Reporting and Documentation</u>   (10%)

- Provides feedback to Faculty, instructors, TAs, and staff regarding service levels and student requirements and actively contribute to improving student experiences in the Experiential Learning Hub and the Media Commons.
- Contributes, as a member of the Experiential Learning Hub and the Media Commons technical team, to the development of technical resources and knowledge in the Experiential Learning Hub and the Media Commons technical areas, including assisting curriculum planning, research and commercial activities.
- Contributes and collaborates with technical team members, as required, to ensure the key priorities and levels of service are met successfully.
- Ensures compliance with health and safety requirements through risk assessments of equipment and materials used in the Experiential Learning Hub and the Media Commons.
- Writes informative and promotional communication to disseminate the work of the Experiential Learning Hub and the Media Commons.
- Prepares monthly, quarterly and annual reports that reflect both qualitative and quantitative data that tells a story about how immersive technology curricula are benefiting Carleton students and contributing to employability.

5. <u>Performs Other Duties as required</u>   (10%)

- Performs other duties as required.

Part D
Specifications: (to be completed by Supervisor in conjunction with Employee)

1. KNOWLEDGE

a)   Minimum amount of formal education required:

Completion of a Bachelor's Degree in a related field such as Media, Computer Programming, or Educational Technology. Completion of a master's degree preferred.

b)   Minimum amount of relevant work experience required:

Minimum of four years of related, progressive, and broad experience in XR authoring and production, media, communications, programming, educational technology. Equivalent combination of education and experience would also be considered.

c)   Minimum amount and type of continuing study required:

The duties must have a passion for self-exploration and building networks to continuously stay abreast of a rapidly evolving ecosystems. This can be accomplished through affiliations with online communities, review and study of literature, materials, white paper and vendor documentation, by attending conferences, seminars, technical meetings and courses, and conversing and collaborating with other professionals in similar fields. The incumbent makes full use of information resources on the Internet; and also exchanges information with professional colleagues at Carleton University. The incumbent must keep current with University policies and procedures.

Elaborate on (a) and (b) justifying the amount of each specified above by detailing what the incumbent has to know and what skills are required of the incumbent in the performance of duties:

The incumbent possesses knowledge relating to:

- Unity, Unreal engine and/or other XR authoring platforms.
- 360 video, Photogammetry, and/or 3D scanning.
- 3D modelling and object building.
- Video editing and asset management.
- Windows OS support/troubleshooting.
- Project management software (such as Jira, Planner).
- Knowledge of API, LTI, Advanced understanding of HTML/CSS, SAML.
- Data visualization, interpretation and expertise working with database structures.
- Camera operations, photogrammetry and basic editing.
- Applications and Educational Techologies.
- Office 365 Applications (PowerPoint, Excel, Teams etc.).
- Brightspace (or Learning Management Systems).
- Kaltura (or Media Management platforms).
- Zoom (or Web conferencing system platforms).
- Poll Everywhwere (student response systems).
- Mahara (eportfolio system).

The incumbent will have experience in one or more of the following areas:
- Demonstrated experience in the delivery of customer service; or
- Demonstrated ability to understand and evaluate technical issues and be able to explain technical decisions and features to both management and clients.

The incumbent will have the ability to work in a team environment, adapt to changing environments, and possess exceptional organizational skills. The incumbent must have the ability to multitask, prioritize work, and work under pressure to meet deadlines; excellent time management skills are required.

Strong communication and interpersonal skills are required to maintain effective relationships with professional colleagues, clients, and administrators.

The incumbent will have the ability to explain, train, and demonstrate web applications, computer-related concepts, and methodologies to clients in the resolution of problems and/or with the introduction of new processes. The incumbent must have knowledge of the trends and developments in enterprise educational technology systems.

This position will require a deep desire to understand and influence how all our Immersive Reality can align with and transform Higher Education. This role is a great fit for an experienced educational practitioner with experience in gaming development or computer science. A strong background in project management, change management and scholarship of teaching and learning will benefit the incumbent.

The incumbent must be able to work on demand including evenings and weekends.

2. COMPLEXITY OF DUTIES

Duties of the position are defined in general terms and are carried out under the direction of the Assistant Director, Digital Learning. Significant up-to-date knowledge and expertise are expected of the incumbent to deal with a variety of issues. Decisions and recommendations require a significant degree of judgement and initiative and must be made in a timely manner. In order to do so, the incumbent must be innovative in the application of established procedures and research and recommend alternative solutions.

The incumbent analyzes, recommends, designs, and assists in the development of new models of technical support to deliver and continually enhance the University's mandate and vision. Requests for analysis and development of systems will come from multiple directions. There is some level of decision making and a strong level of accountability in this role. The incumbent works under general guidelines and is expected to keep departmental management informed of impending situations that may require management intervention or strategic, operational or policy re-evaluations.

Judgement is exercised in assessing and comprehending clients' needs and in effectively transferring information and training to clientele.

3. ACCOUNTABILITY:

The incumbent is responsible for rendering technical advice to managers and staff in University departments. The incumbent must often make decisions independently. This implies a certain degree of independence and initiative, and, therefore, requires excellent communication skills and time management skills.

The incumbent works in an environment where the consequences of error and poor judgment will frequently have an impact on faculty members, students and the reputation of Teaching and Learning Services and the University. Misinterpreting or selecting an inappropriate strategy or application will

result in in issues related to reputation, waste of resources (time and money), insecure personal data, and student success.

Failures in software could result in extended system downtime, irretrievable loss of data, and loss of reputation to the department and the University.

4. NATURE AND LEVEL OF CONTACT

a) Purpose of contact

Consults primarily widely with faculty, instructors, TAs, staff, students, and community members. Must possess superior communication skills and be able to work under pressure, demonstrate patience and empathy, and uphold the highest ethic of care and confidentiality.

b) Level (check one) - regular and continuous only and as specified in Part 'C'

- ☐ other employees in same work unit or office.
- ☐ the above plus students; faculty in the same work unit; or employees from other departments or offices at a similar job level to the incumbent.
- ☒ the above plus the general public, faculty and staff at a more senior level from other departments or staff at equivalent levels outside the university.
- ☐ all the above plus senior University executives and senior officials from government, private industry, other universities, etc.

5. SUPERVISION/MANAGEMENT CONTROL EXERCISED

a) Describe the type of supervisory/management control exercised. Indicate responsibility for overall direction of a section/department/unit either independently or through subordinate supervisors if applicable.

Supervises students who help with the operation of the XR related rooms.

b) Indicate the level of employees directly (not through subordinates) supervised.

i ☒ primarily support

ii ☐ primarily specialized technical, Administrative or journeyman trades

iii ☐primarily supervisors of (ii), or managers of section consisting of (i) employees

iv☐ primarily management level

c) Indicate number directly supervised.

☒ 0 ☐ 1-5 ☐ 6 – 10 ☐ 10 +

NOTE: *Under the Occupational Health and Safety Act, the incumbent is required to be familiar with the Act and the regulations that apply to the work being performed in the work unit. The incumbent is also responsible for ensuring that individuals they supervise are aware of their rights and obligations under the Act.*

Signed By:

_____   _____
Employee   Date

Approved By:

_____   _____
Immediate Manager   Date

_____   _____
Department Head   Date