

<b><u>Position Title:</u></b>	Full Stack Developer
<b><u>Project:</u></b>	DIVERT Mental Health
<b><u>Reports to:</u></b>	Professor Rebecca Pillai Riddell, Principal Investigator
<b><u>Contract Term:</u></b>	1-Year
<b><u>Hourly Rate:</u></b>	\$35.00 an hour
<b><u>Hours of Work:</u></b>	15-20 hours/week

#### **ABOUT DIVERT MENTAL HEALTH:**

Funded by the Canadian Institutes of Health Research, the Digital, Inclusive, Virtual, and Equitable Research Training in Mental Health Platform (DIVERT Mental Health) sets out to disrupt the mental health system for children, youth, and families. A significant proportion of people who are marginalized in Canada do not get access to mental health interventions and supports despite the benefits of cutting-edge research on mental health digital/virtual technologies, advances in artificial intelligence, and persuasive design of interventions. The primary goal of this transdisciplinary project will be to equip new and emerging/trainee clinician-scientists from every university in Canada with a broad range of knowledges, skills, and mentoring supports to improve inclusivity and accessibility of the current primary mental health system.

We will be building an innovative, state of the art, online learning platform with our key industry partner IBM Canada, a community of DIVERT Lecturers (health researchers in academic and non-academic settings, NGO experts, Industry experts and Patient/Family advocates). This platform will be targeted to DIVERT Fellows who live in Canada (undergraduate, graduate, postdoctoral and early career who are accepted into our program), DIVERT Guests (anyone globally with an interest to participate in didactics on mental health, equity and technology), NGO partners, and Industry partners will be cultivated, grown and integrated into our online platform.

#### **JOB PURPOSE:**

As this role will be the first on the DIVERT team that will be involved with systems set-up and maintenance, the ideal candidate needs to be comfortable with overall infrastructure creation and maintenance in a virtual hardware environment as well as specific development tasks that may be required. The Full Stack Developer will work with both IBM Canada and York IT Consultants to set-up and manage a system environment that will support a variety of critical elements. The planned systems workspace will be a combination of SOSCIP cloud computing and York University internal systems. More information about SOSCIP can be found here. <https://www.soscip.org/>

One system element that will need to be developed is a novel mentoring matching algorithm that will provide trainees with optimal mentor group options based on the intersection of lived experiences that the mentors possess and the trainee desires. Fellows will rank 'lived experiences' in order and the algorithm will suggest options for optimal mentors based on the rankings.

#### **MAJOR DUTIES:**

- Set-up and maintain virtual system environments required to host the various DIVERT system elements as described below. This involves deployment of various virtual system and software as well as managing user access to various systems

- Set up an online learning management system which will have been created, archived, and hosted via an in-kind donation of computing, software, storage, and consulting by IBM via the SOSCIP network
- Develop and maintain a mentoring matching algorithm via app software that can be hosted on DIVERT's website (currently in production).
- Develop and maintain a database of NGO/Industry partners that can be hosted within DIVERT's website.
- Offer support to DIVERT's Program Manager and PI Pillai Riddell with tasks related to DIVERT's partnership with IBM Canada and the SOSCIP network.
- In collaboration with DIVERT's hired website and brand developer, maintain, and evolve the DIVERT Mental Health website.

## **QUALIFICATIONS:**

### Education and Required Experiences:

- Undergraduate degree in Computer Science or Software Engineering required
- Current student completing a Master of Computer Science (or related discipline) is preferred
- Demonstrated experience building computer systems (virtual machines, programs, platforms, computer servers) and experience with cloud platforms for building virtual infrastructure (e.g. virtual machines, networking, etc.).
- Experience with website development and computer science languages (Python, HTML, CSS, JavaScript and their frameworks).

### Skills and Preferred Experiences:

- Proven ability to exercise good judgement, take initiative, and work independently.
- Strong planning, coordination, problem-solving, and organizational skills.
- Demonstrated organizational and problem-solving skills.
- Prior experience with container-based application development and container orchestration platforms such as Kubernetes
- Fluency in LMS plug-ins (i.e., WordPress, Customer Relationship manager, Zoom licenses, Webinar license, curriculum management)
- Experience with SOSCIP network or similar virtual computing environments

### Application Instructions:

Please submit a cover letter and updated resume to Emma Yuen, Senior HR Officer, Office of the VP Research & Innovation at [emmay@yorku.ca](mailto:emmay@yorku.ca). Please indicate the job title in the subject line.

This position is open until filled, however applications will be assessed on August 22 for the first round of interviews to occur later that week.