CENTRE FOR THE STUDY OF SCIENCE AND INNOVATION POLICY
UREGINA USASK

Posting Details:	
Department/Unit	Digital Epidemiology and Population Health (DEPtH) Lab, Johnson Shoyama Graduate School.
Position Title	Mitacs Accelerate Intern
Number of	2
positions	
Salary Range	As per Mitacs Accelerate internship: \$30,000/year
Duration (if term)	One year: December 2020 to December 2021
Full-Time/Part- Time	Full-Time
Work Hours:	40 hours/week
Project summary	CO-Away: A Rapid Response Digital Tool to Tackle COVID-19:  CO-Away is a digital epidemiological platform that leverages the approach of SMART Platform in integrating ethical surveillance, integrated knowledge translation, and policy and behaviour interventions. This platform is being implemented through the Digital Epidemiology and Population Health Laboratory (DEPtH Lab) at the Johnson Shoyama Graduate School of Public Policy, University of Regina. It is critical to emphasize that CO-Away app will be designed to not only address population health risks during the current wave of the pandemic, but will also be structured for rapid response during subsequent waves of COVID-19 as well as other communicable disease outbreaks.  The CO-Away mobile app provides three key precision medicine services that are specific to each citizen: 1) continuous risk assessment of contracting COVID-19 via the virtual doctor feature; 2) evidence-based public health communication; and 3) Citizen reporting of food availability, access to public services, and COVID-19 symptoms and test results.  The data from the virtual care app are transferred in real-time to a digital decision-maker dashboard, which is securely accessed by the Principal Knowledge User.  This platform will enable the deployment of real-time evidence-based interventions that can support the community healthcare services.
Position Summary	<ul> <li>As the Mitacs interns, the students will work under the supervision of Dr. Tarun Katapally and work with the DEPtH Lab team to develop a sophisticated mobile application platform using the latest technologies.</li> <li>The interns will:</li> <li>Design and create both the mobile app and the digital decision-making dashboard.</li> <li>Write high quality source code to complete tasks within deadlines.</li> <li>Perform app and dashboard testing before launch</li> <li>Troubleshoot and debug aspects of the app and the dashboard.</li> </ul>

	<ul> <li>Evaluate existing applications to reprogram, update and add new features.</li> <li>Develop technical documents and handbooks to accurately represent application design and code</li> <li>Assist with enhancements and maintenance of the products currently in production</li> </ul>
Requirements/ Skills	<ul> <li>University students registered in graduate degree/diploma programs in computer science.</li> <li>Recognized diplomas or certificates in software development, with particular expertise in working with app and dashboard development frameworks</li> <li>In-depth knowledge of programming for diverse operating systems and platforms using development tools</li> <li>Excellent understanding of software design and programming principles.</li> <li>Experience in building fully native iOS and Android applications for a variety of devices.</li> <li>Analytical thinking and problem-solving capability</li> <li>Great attention to detail and time-management skills</li> <li>Working knowledge of the following:</li> <li>C# / XAML/ Xamarin/Azure/ React Native or other cloud platforms</li> <li>Knowledge In Artificial Intelligence, Machine learning, Deep learning, Internet of Things, Data Structures and Algorithms, Computer Networks, Operating Systems, Database Management</li> <li>Programming/Scripting Languages: C/C++, Python, SQL, Java</li> <li>Website Design: HTML5, CSS, WordPress, JavaScript (basic level)</li> <li>Experience with TFS, Agile software development methodology, unit testing, DevOps, Sketch considered a benefit</li> <li>Ability to write clean, well-documented code.</li> <li>Productivity: Agile Process (Azure DevOps), Scrum Planning, Office 365 (Word, Excel, PowerPoint, Teams), LATEX</li> </ul>
Required Applicant Documents:	Cover Letter Resume/Curriculum Vitae 3 References