

Title: Mobile Wearable Systems Software Developer

Group and Level: Students eligible for the Collaborative Learning of Usability

Experiences (CLUE) Program

Duration of employment: FT - 16 weeks or PT - 52 weeks

Language skills: English Essential

Location: We are located in the new Innovation Centre at Bayview Yards in Ottawa.

Security clearance: No requirement

Submission deadline: 2 weeks from the date of posting

Our Story:

contextere is building an intelligent personal agent for the industrial workforce. Using predictive intelligence based on machine learning and a powerful content curation engine, **contextere** delivers consumable, contextually relevant information based on an individual's location, local context, competencies, and digital ID.

We're answering the critical question: Now what?

Unlike enterprise analytics platforms or edge-based smart machines, *contextere* takes a human-centric approach to the Industrial Internet of Things (IIOT), focusing on each worker in the field, and delivering to their mobile or wearable devices just the essential information required to conduct minute to minute operations and maintenance activities. With *contextere*, actionable data provided at the point of service will reduce unplanned downtime, increase productivity, and save lives.

If you're interested in empowering the 21st century workforce with the latest capabilities from the fields of machine learning, augmented reality, and mobile and wearable devices, drop us a line!

The Role:

We're looking for a *Mobile Wearable Systems Software Developer* to drive our frontend mobile software development strategy. You know your mobile devices, and have ideally had experience developing user experiences using WP, iOS, and Android phones and tablets and would love to experiment with user interfaces on smartwatches and head-worn displays.

You love all things mobile and wearable, have maybe programmed for a fitness band or smartwatch, and are fascinated by the ability to combine location based understanding, multi-sensor information fusion, and push notifications to guide people based on their context.

You don't need to be a UI/UX expert, but you understand simplicity in interaction and display and appropriate ways to delivery important information on small displays. In your role, you'll recommend, choose, and use mobile application development frameworks to rapidly build and evolve the front-end experience for the *contextere* platform. You have the ability to craft a high level architecture but can also roll-up your sleeves and write code to build the product. You understand trade-offs and the need for flexibility, while having the strength and communication skills to enable others to understand your



strategy. You understand that agile means iteration and deep dives, but it also means commitment to delivery and quality. While you're focused on the front-end, you understand dev-ops development models to abstract and connect to an enterprise back end built on a platform-as-a-service (PaaS). You understand reliability, security, and scalability in the context of mobile application development.

In your role you will:

- Lead the analysis and design of the mobile front-end to the *contextere* platform
- Analyse and select a mobile application development framework to build crossplatform mobile applications
- Support the design of the mobile UI/UX, for smartwatches, phones, tablets, and HoloLens
- Define an agile prototyping strategy to build and evolve the mobile and wearable front end on multiple devices with integration to the *contextere* curation platform back-end services with integration to critical enterprise data systems and IIOT stream data environments
- Evolve the platform with continuous deployment on multiple mobile and wearable devices

You are:

- Passionate about mobile and wearable solutions and enterprise scale mobile information access and distribution
- Comfortable with self-directed outcome-based exploration with minimal supervision
- A strong communicator at a variety of technical and non-technical levels
- Insightful and can grasp and integrate new concepts quickly
- Curious, creative, and self-driven

You have the following skills:

- Master's or PhD degree (completed or in progress) in a relevant discipline
- Knowledge of commercial and open source mobile application development frameworks
- Understanding of techniques and constraints of mobile and wearable UI/UX design
- Strong programming skills appropriate to mobile and wearable application development
- Understanding of dev-ops development and deployment philosophies
- Understanding of SOA web services/RESTful implementations, WCF, WebAPI
- Ideally, knowledge and experience with Microsoft Azure platform as a service (PaaS) including stream analytics and machine learning components
- Ideally, experience with mobile application development and Industrial Internet of Things (IIOT) architectures