

## **Design Research Assistant**

Duration: 4 months, with possibility of extension to Winter term (Jan-April)  
Hours: up to 10 hrs/week  
Start: Sep 1  
End: Dec 20

### **Job Description:**

This is a novel opportunity to apply knowledge of human factors, UX, and systems design to understand how technologies can help support the independence for the aging population. A successful candidate will be able to work collaboratively within a team of Physicians, Engineers, and others with results that benefit populations in need. A successful candidate will primarily work on the Carleton campus in collaboration with the Bruyère Research Institute.

**Project context:** The SAM3 Innovation Hub is a collaboration between Carleton University, Bruyère Continuing Care/Research Institute and AGEWELL NCE that is focused on applications of Sensors and Analytics to Monitor Mobility and Memory (SAM3). SAM3 has research and demonstration facilities located at Carleton University and the Elizabeth Bruyère Hospital in Ottawa and the group requires a skilled designer or design student to work on the design of a Tracker device and app to support safety for Persons Living with Dementia.

The student will specifically join the SAM3 SME Support for Aging in Place Technology CTO (<https://carleton.ca/sam3/nrc-irapcto/>) which is an ongoing program supported by NRC IRAP where the SAM3 research team engages with Canadian SMEs to provide them expertise, guidance across two key service sets where each project is defined to match the needs of the company leading to very diverse technical work across hardware, software, usability, and other areas:

1. Solution Testing: For SMEs with an existing technology that requires usability/acceptability testing

- Usability/acceptability testing

- Feasibility testing

- Development of evaluation protocols

- Peer-reviewed evaluation of R&D

2. Solution Piloting: For SMEs with a proven technology requiring pilot testing at a small or large scale

- Pilot testing (small or large)

- Development of evaluation protocols and validation programs

- Peer-reviewed evaluation of R&D

The reality is that each project is unique and custom-designed for the company. A project lasts typically 4 months, and we can have numerous projects running in parallel leading to extremely diverse skills needed.

**Responsibility:** The successful candidate will be joining the multi-disciplinary team of engineers, clinicians, industrial designers.

App/Interface Design: Creation of concepts and wireframes for applications

Testing and evaluation: Evaluation of existing and new designs using focus group/interview/usability testing data collection and analysis

Facilitating focus groups and interviews, usability testing

Provide regular updates to the research team

Other duties as required

**Opportunity:** Hours will be negotiated but the candidate will work in the SAM3 labs at Carleton and Bruyere, as well as the opportunity to work remotely. (up to 10 hours per week)

Skills:

Experience performing design research

Human factors design expertise

Accessibility design expertise a bonus

If someone is interested, they can contact Dr. Bruce Wallace at [raymondwallace@cunet.carleton.ca](mailto:raymondwallace@cunet.carleton.ca) to learn more about it. They can also contact Meg Schweltnus ([megschweltnus@cunet.carleton.ca](mailto:megschweltnus@cunet.carleton.ca)) to indicate interest.