

Research Assistant Opportunity Casual Position Simulation and Multiagent Systems Research

Position start date: November 2024

- Duration: 1 year (with possibility of extension)

- Location: Edmonton or virtual, Canada

Overview:

<u>Dr. Oscar Lin</u>, a professor at School of Computing and Information Systems at Athabasca University in Canada is seeking a highly motivated Postdoctoral Fellow to join our research team collaborating with <u>Dr. Henry Leung</u>'s team at Department of Electrical and Software Engineering of the University of Calgary in Canada for part-time research assistant positions, focusing on **Simulating Multi-agent systems for Enhancing Situation Awareness and Uncertainty Assessment in Multi-UAV environments**, funded by Major Innovation Fund (MIF) in Space and Defence Technologies Alberta (SDTech_AB).

The successful candidate will work on simulating intelligent and collaborative frameworks to improve situation awareness and uncertainty assessment capabilities of multi-UAV systems operating in complex, dynamic environments. This cutting-edge research aims to leverage the collective strengths of individual agents to achieve more comprehensive situational understanding.

Specific activities include, but are not limited to:

- Implement a simulation system for multi-agent coordinating multiple UAVs
- Conduct simulations and real-world experiments
- Collaborate with interdisciplinary team members and industry partners
- Publish research findings in top-tier conferences and journals

Qualifications:

Required:

- Master students in Computer Science, Information Systems, or a closely related field
- Strong programming skills in Python, C++, or similar languages
- Experience with multi-agent systems and UAVs
- Excellent written and verbal communication skills in English



Preferred:

- Knowledge of machine learning, computer vision, or sensor fusion techniques
- Familiarity with ROS (Robot Operating System) or similar robotics frameworks
- Track record of publications in relevant conferences or journals

How to apply:

Qualified individuals are encouraged to submit their application by email to Dr. Oscar Lin at oscarl@athabascau.ca. Applications should include (as a single PDF file) a brief cover letter that summarizes your skills, interests and experience; a current resume or curriculum vitae; an unofficial copy of your transcript; and the contact information for 1-2 references.

Evaluation of applications will begin immediately and will continue until a suitable candidate is found. All applicants are thanked for their interest in this position; however, only candidates selected for an interview will be contacted.

Athabasca University and the researchers are committed and seek to support equity in employment and research opportunities. We strongly encourage applications from Indigenous people, people of colour, people with disabilities, 2SLGBTQ+ people, women, and other historically marginalized groups. Applicants are welcome, but not required, to self-identify in their letter of application.

For more information on this Research Assistant Opportunity, please contact Oscar Lin, PhD at the coordinates below, on or before October 31, 2024. Applications will be accepted until October 31, 2024 or until a suitable candidate is found.