

Research Assistant Opportunity Multiagent Systems and UAV

Position Start Date: October 2026

Dr. Oscar Lin, a professor at School of Computing and Information Systems at Athabasca University in Canada is seeking a highly motivated research assistant to join our research team, focusing on 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).

Overview:

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.

Key Responsibilities:

- formulate multi-objective optimization MARL problem for multi-UAV 3D Wildfire Seeking and Detection problem
- 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

Location: Edmonton or Virtual, Canada

10-30 hours per week

Duration: until March 31, 2027 (there could be a possibility of extension dependent on funding)

Qualifications:

Required:

- Post-doctoral or Ph.D. or Master or Senior Undergraduate students in Computing Science, Computer Engineering, Electrical engineering, Information Systems, or a closely related field
- Strong programming skills in Python, C++, or similar languages
- Experience with multi-agent systems, reinforcement learning, 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 2 references. Deadline is September 15, 2026.

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.

We particularly encourage applications from students who are from underrepresented backgrounds and/or who have a demonstrated commitment to fostering diversity, equity, and inclusion.

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.

