



FSC Newsletter (Summer 2023)

Summer 2023 was filled with lots of travel, with several conferences attended and great contributions from our summer students!

This summer, we welcomed six new summer students: Zhiming, Harry, Sana, Enoch, Max, and Ajay! Our office is busy and hectic with all the new faces and ongoing projects!



Over the summer, Professor Liu had the opportunity to showcase our pioneering work in coordinated control for autonomous drone sampling applications at multiple esteemed conferences, including the 8th International Conference on Automation, the 6th International Symposium on Autonomous Systems, and the International Conference on Aerospace System Science and Engineering.



Helson Go attended the 2023 IEEE/ASME International Conference on Advanced Intelligent Mechatronics (AIM) in Seattle, USA, and presented our recent progress about image-based visual servo control. His presentation delved into the innovative techniques and breakthroughs that our researchers have achieved, underlining the importance of visibility constraints in image-based visual servo control.





While travelling on sabbatical in China, Prof. Liu had the opportunity to meet with recent FSC alumni Dr. Flora Fu and her husband. We wish you good luck in the next chapter of your career Flora!

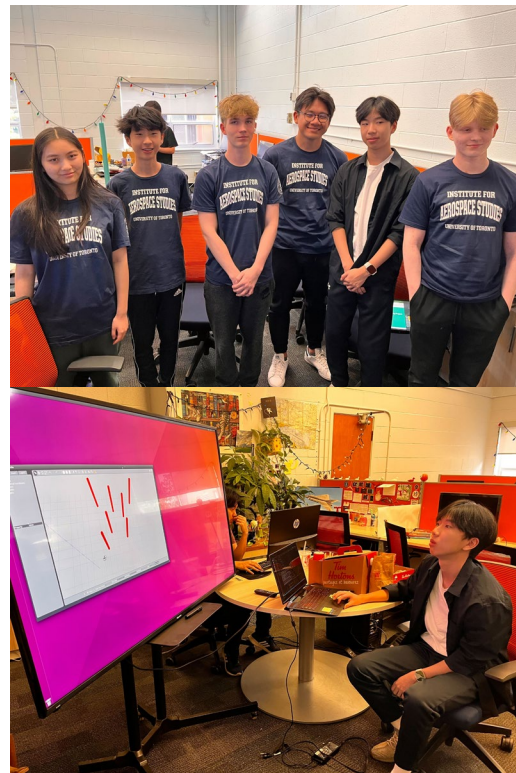


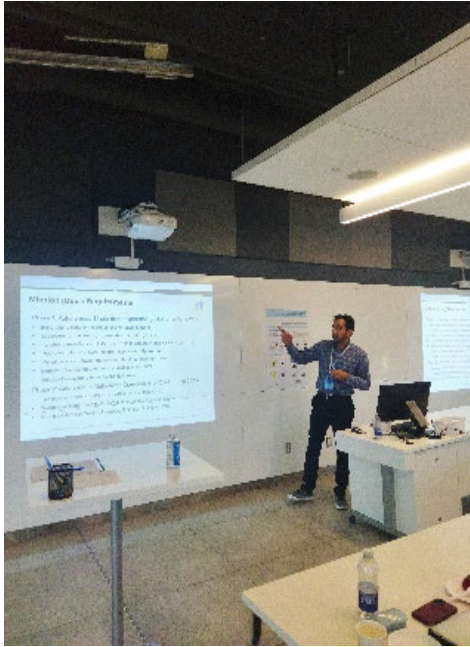
Cindi Feng and Shangyi Xiong had the privilege of presenting their groundbreaking research at the prestigious IEEE Conference on Control Technology and Applications (CCTA), which took place in the beautiful setting of Barbados this August.

This year, our **Aerial Robotics Club (ARC)** hosted an in-person club session for the first time in program history!

The Aerial Robotics Club hosted by the FSC is our outreach club, aimed at helping high school students have a taste of a STEM career and academic research life.

This year, our students completed a variety of mini-projects, including creating a path planning algorithm, design of a pitot static tube, and implementation of a ML object recognition algorithm. Great work students!





Chao Qin and Reza Fattahi made notable contributions at the International Conference on Advanced Unmanned Aerial Systems (ICUAS), hosted at York University in Toronto. Chao captivated the audience with our pioneering research on autonomous drone racing, employing pure vision as a key component of our innovative approach.

Simultaneously, Reza Fattahi provided a comprehensive overview of our state-of-the-art controller, showcasing its exceptional capabilities in handling slung-payload flights. Their presentations not only exemplified our institution's commitment to pushing the boundaries of unmanned aerial systems but also sparked meaningful discussions and collaborations within the global UAV research community.



We hope your summer was as productive and enjoyable as ours was!