2cofly
Drone Service and Education Provider
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Work Plan

Internship Overview
This internship provides hands-on experience in professional drone operations, geospatial mapping, and aviation education.

The student will work alongside 2cofly's professional team to learn how drone technology is applied to real engineering, infrastructure, and mapping projects across Guam.

Our objective is to develop the student's technical knowledge, practical skills, professional judgment, and communication abilities through structured training and participation in actual projects.

Scope of Work & Learning Objectives

A. FAA Part 107 Certification & Flight Training
The intern will participate in 2cofly's FAA Part 107 training program, covering aviation regulations, airspace, weather, flight safety, and mission planning.

The student will also receive practical drone flight training under the supervision of experienced pilots, including preflight inspections, equipment setup, basic flight maneuvers, and operational safety procedures.

B. Professional LiDAR & Photogrammetry Mapping
The intern will participate in actual geospatial mapping projects alongside 2cofly's technical team.

Activities may include mission planning, field preparation, drone data collection, GNSS ground control, data processing, and quality assurance.

The student will learn how LiDAR and photogrammetry data are converted into practical mapping products, including point clouds, elevation models, contours, and orthomosaics.

C. MEGA Project Participation
The intern will contribute to selected activities within 2cofly's MEGA Project, a large-scale initiative to produce detailed geospatial mapping information across areas of Guam.

Under supervision, the student may assist with ground control collection, field documentation, mission preparation, data processing, and quality checks.

The student will select one approved mapping activity or dataset to develop into a short technical case study documenting the workflow, findings, challenges, and practical applications.

D. STEM Education & Technical Communication
The intern will participate in 2cofly's professional drone training workshop and, when scheduling permits, assist instructors in teaching selected topics or demonstrating practical skills.

Throughout the semester, the student will document their learning and project contributions.

The internship will conclude with a technical presentation at the NASA Guam Space Grant Symposium, demonstrating the student's experiences, findings, and professional development.

Timeline	Primary Activity
Jan 25 - Feb 12	Onboard; Part 107 study plan and safety orientation; define question and deliverables.
Feb 15 - Mar 12	Supervised field and processing practice; begin MEGA/approved dataset case study.
Mar 19	Submit mid-semester progress report; present interim work if NGSG schedules it.
Mar 22 - Apr 30	Complete assigned project contribution; prepare technical exhibits and workshop activity.
May 3 - May 21	Finalize case study, mentor review, symposium presentation, and final written report.

Expected Student Deliverables
By the conclusion of the internship, the student is expected to have:

1. Completed structured aviation training, including FAA Part 107 preparation and supervised practical flight instruction.
2. Participated in professional mapping operations, gaining exposure to LiDAR, photogrammetry, GNSS, and geospatial data processing.
3. Prepared a technical case study documenting an approved project or mapping dataset, including methods, observations, and results.
4. Developed technical communication skills through workshop participation and a professional symposium presentation.
5. Submitted the required NGSG progress and final reports, supported by documented internship activities.

Dong Won Lee will serve as the primary mentor, overseeing the student's learning objectives, overall technical guidance, and final presentation.

Javier Garrido will serve as a secondary mentor and will provide direct guidance during flight operations, mapping projects, hands-on training, progress evaluations and project assignments.

The student will participate in regular progress discussions and maintain an activity log documenting assignments, learning experiences, and accomplishments.

All field activities will be performed under appropriate professional supervision. Flight operations, technical assignments, and access to project data will follow applicable safety requirements, professional licensing restrictions, and client confidentiality obligations.

6. Intended Outcome
Our goal is for the student to complete the semester with more than an introduction to drone technology.

By the end of the internship, the student should understand how professional drone mapping projects are planned, executed, processed, and evaluated.

We aim to provide a meaningful professional experience that develops practical STEM skills, initiative, technical understanding, and career readiness.

Dong Won Lee
CEO, 2cofly