

Directed Studies Project Opportunity

An aerospace R&D company is looking for a senior undergraduate or graduate student to participate in a project in the format of a directed study under the academic supervision of Prof. M.I. Yaras. The candidate should be proficient in ProE / Creo and/or Adams MSC Software and will be asked to create a parametric model of a simple airplane. Initially this will encompass tube and cable structure from simple sketches with manually obtained dimensions, then fabric wings with complex curves obtained from 3D scanned files.

This directed studies project will support the development of a novel unmanned aerial vehicle (UAV) designed to carry up to 500 lbs of cargo to remote, isolated communities in Canada. The goal of the project is to use the 3D models to support the development of a computerized flight controller and permit autonomous flight.

The project will start in September, 2015 and end in December, 2015 with deliverables at regular intervals. There may be some limited travel to the Kingston, ON area to take photographs and measurements. Expenses will be reimbursed, and the company will pay honoraria for milestones achieved.

ref:-

<http://www.ptc.com/product/creo/proengineer>

<http://www.mscsoftware.com/product/adams>