

RESEARCH CLINIC

General information

Supervisor:	Dr. Paul F. Hudson
Title of clinic:	Digital Landscapes (making a digital elevation model (DEM) using standard smartphone technology)
Number of students:	2
Major (if applicable and approved by the Major Convener):	EES and elective
(Pre)requisites (if applicable):	Runs only in bk-4

Creation of digital elevation models (DEM) from simple smartphone technology.

The aim of this RC is to implement a procedure to utilize 3D imagery obtained from the ‘structure from motion’ technique (https://en.wikipedia.org/wiki/Structure_from_motion) for the creation of a digital elevation model (DEM).

3D imagery is the key to obtaining low cost and reliable DEMs, the primary tool for topographic and hydrologic mapping and analysis, as well as mapping cultural heritage (among many other applications).

Discuss your qualifications and availability with Dr. Hudson.

Please specify the tasks and activities, timeline, the learning aims and how they are assessed, i.e. what the deliverables will be.

Tasks and activities (to be determined in consultation with student):

- required: a standard smartphone, be somewhat clever with technology, independent problem solver.