

Master of Data Science - University of British Columbia Okanagan

Minutes for May 5, 2020 - 3:00 PM - 3:30 PM PST

Present: Sofia Bahmutsky, Ngan Lyle, Kaitlyn Hobbs (Minutes), Shreeram Murali, Debangsha

Agenda

1. Review Debangsha's strategies with Statistics Canada LODE

Meeting Notes

[Debangsha's Capstone Github](#)

- Microsoft buildings DB used deep learning to draw blocks of buildings (footprints) - otherwise would be required to draw by hand because satellite image is comprised of fragmented components.
- Can code 'arcGIS' in python and plot with python packages - 'GeoPandas'. 'arcGIS' is proprietary, UBC has licenses but need to contact Scott for usage.
- Multiple layers of polygons to generate blueprints of provinces and buildings - all need to be rendered.
- Their team created web application for visualization but did not use a server due to work of task.
- Urban cluster algorithm implemented by Statistics Canada (uses arcGIS) for regions into types (commercial, residential... etc.).
- Need to study some of Statistics Canada's matrices for geographical divisions e.g. counting building densities ($\frac{\text{number of buildings}}{\text{area}}$).

Terminology

rasta files satellite images.

dissemination block collection of buildings and road.