# Machine Learning for Geospatial Vector Data

Workshop #1 Please visit bit.ly/geoml-1

Presented by Jaydeep Mistry & Juan Carrillo

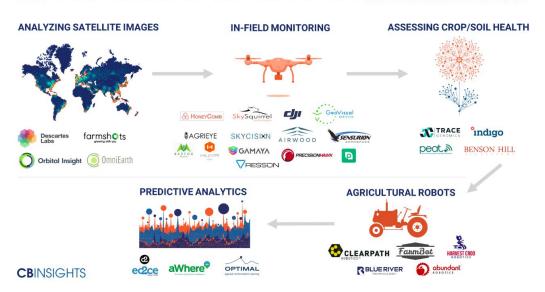
On behalf of the Geospatial Club - Winter 2019 In partnership with the Geospatial Centre

## Agenda

- 1. Introductions
- 2. Why should we care about Machine Learning?
- 3. Setup of the cloud-computing platform
- 4. Perform Data Exploration
- 5. Apply Machine Learning
- 6. Wrap-up

## Machine Learning in Agriculture

#### **5** USE CASES OF AI + ROBOTICS IN AGRICULTURE



# Why apply Machine Learning for Geospatial Data?

Additional sources:

Al and Machine Learning with ArcGIS

<u>UWaterloo WatMos Lab</u>



## How to perform Machine Learning online?



- Free-to-use platform
- Designed for Data Science
   Competitions
- Full integration with Python and R for Cloud Computing

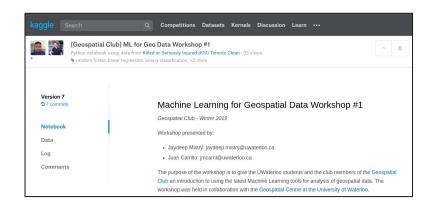
Optional: Google Colab, Earth Engine

### Let's get started!

#### **Dataset**



#### Notebook (aka Kernel)



## **Data Cleaning**

For the people who requested to see what the Data Cleaning process was for the dataset used in this workshop:

Original <u>Dataset</u>

• Data Cleaning Notebook

# Wrap-Up

Thank You to the Geospatial Centre for this collaboration!

Please upvote Kernel and dataset.

Next workshop on Feb 13th!
Same room, but meet at 2pm.

Machine Learning for Geospatial

Data Workshop #2 - Raster Data

Apply and vote for Exec positions GeoClub (undergrads)

Contact us at:

https://www.facebook.com/uwgeospatial/

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