Using Data Science Skills to Solve Geoscience Problems

Presented by

Jing Ting Chong
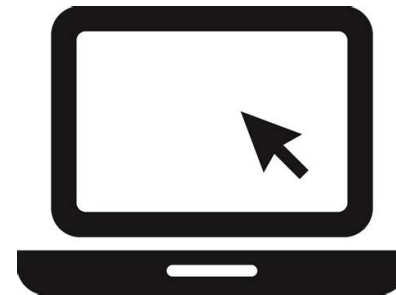
June 1, 2022

Geoscience Challenges: Data Extraction

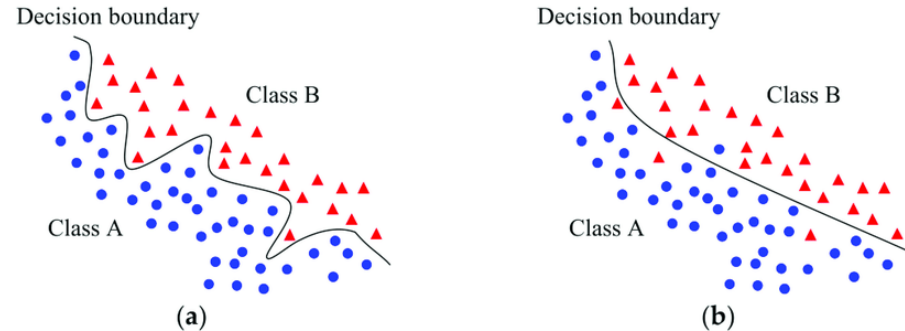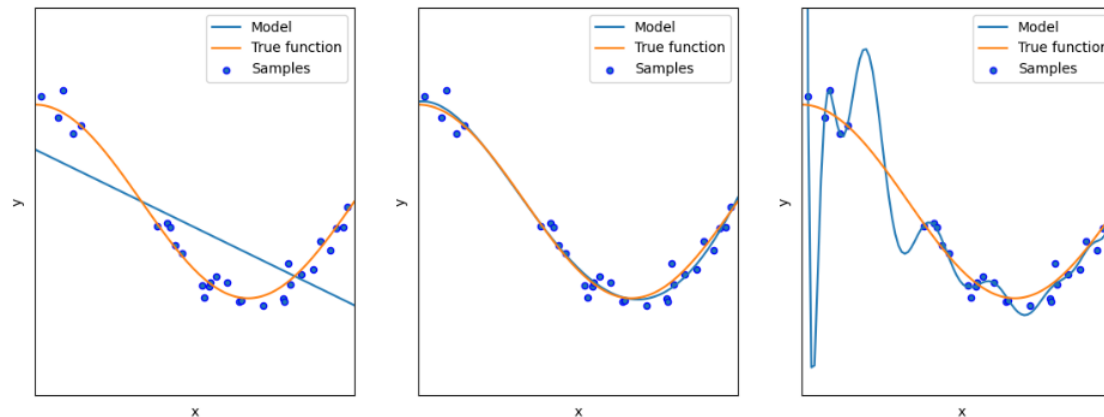- Variety of data format

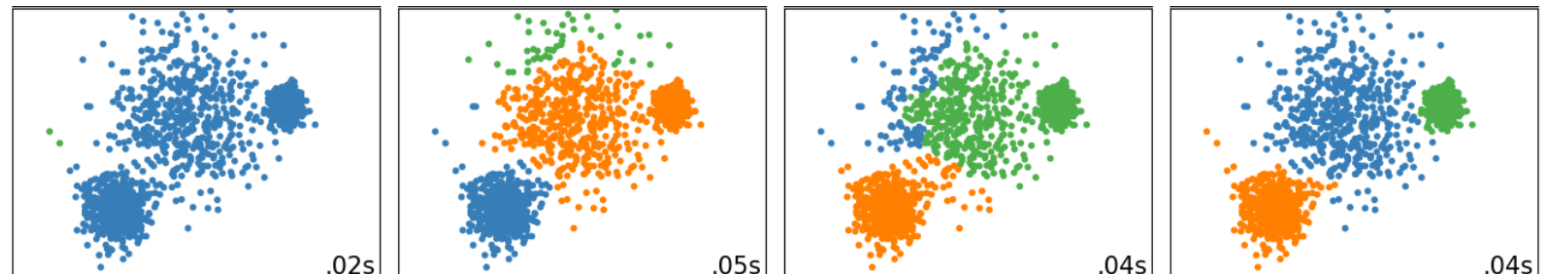- Variety of data sources

Geoscience Challenges: Analytics

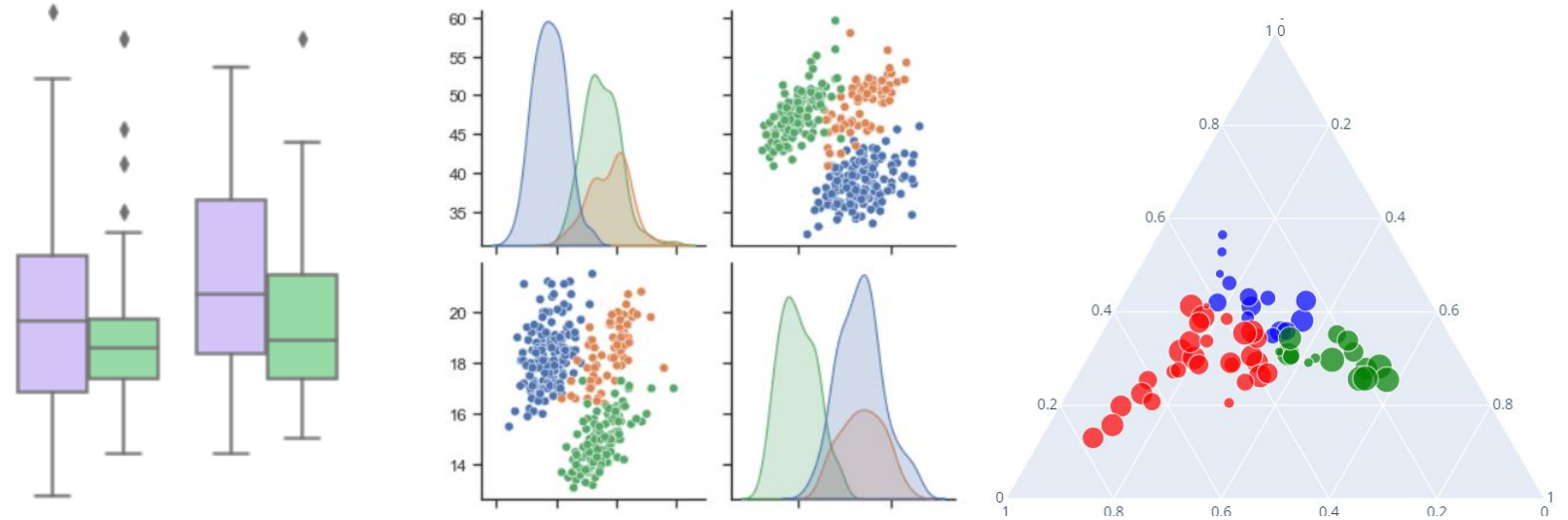- How to define decision boundary?

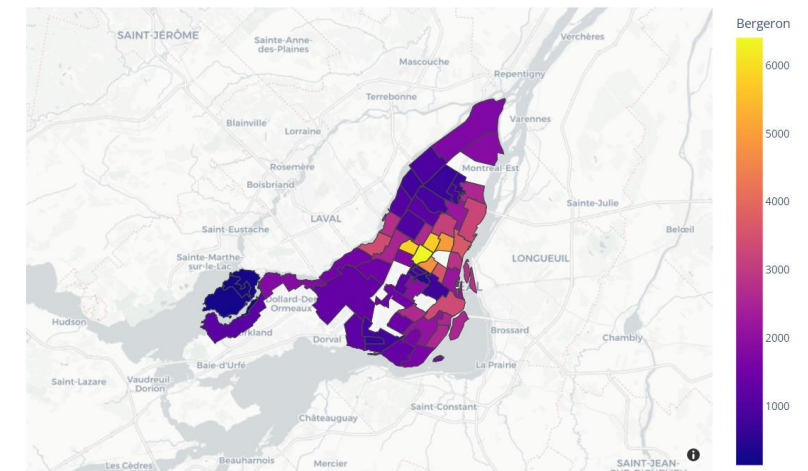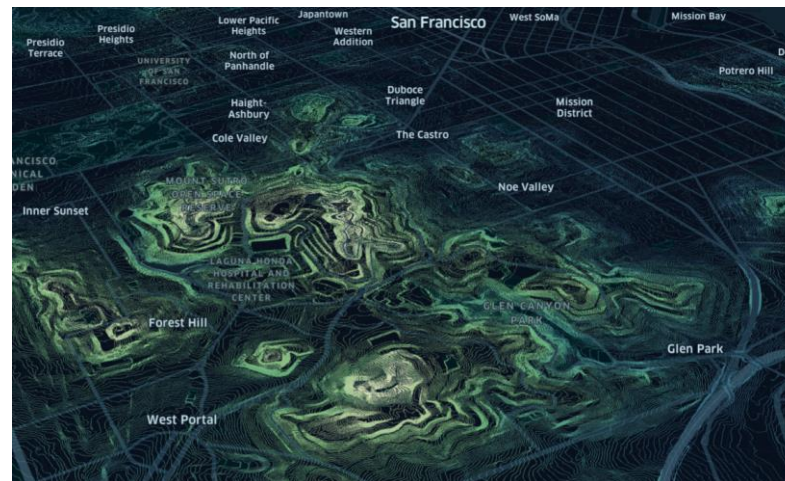- How to get the best fit of line?

- How to cluster the samples?

Image source: scikit-learn.org

Geoscience Challenges: Visualization

- Data visualization

- Geospatial visualization

Case Study
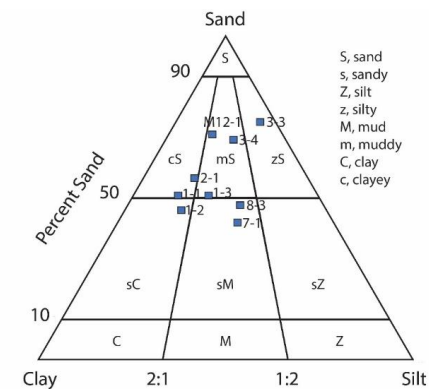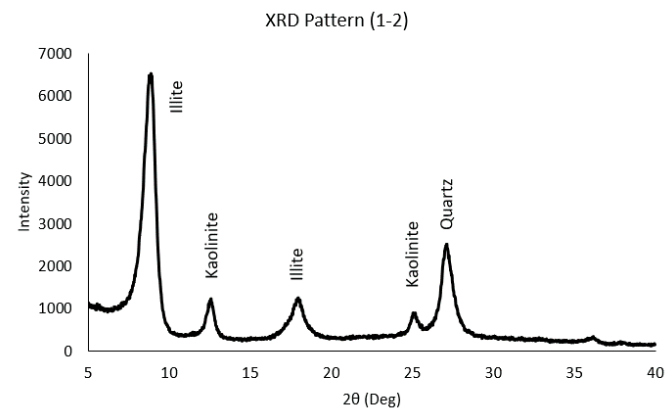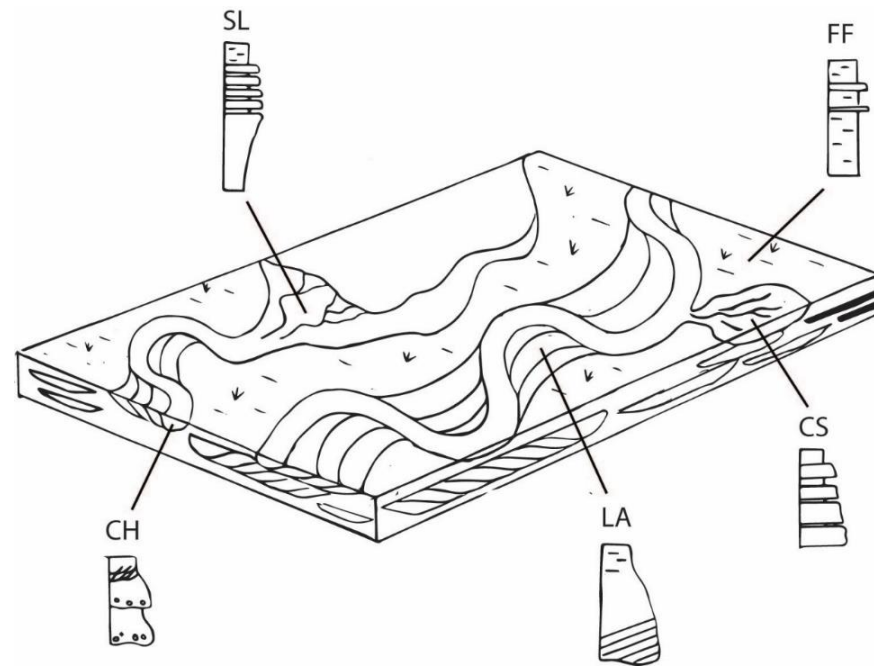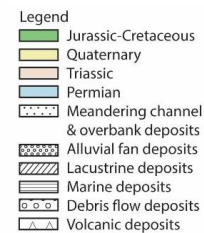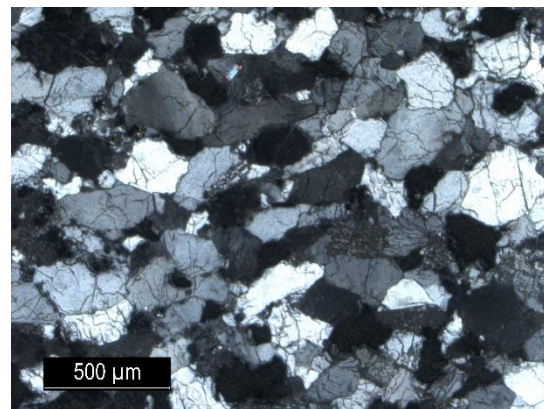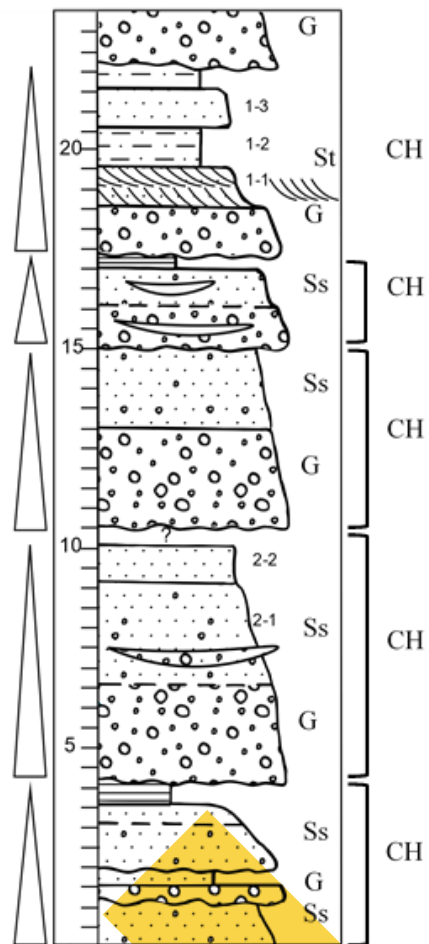
Grain Size Analysis
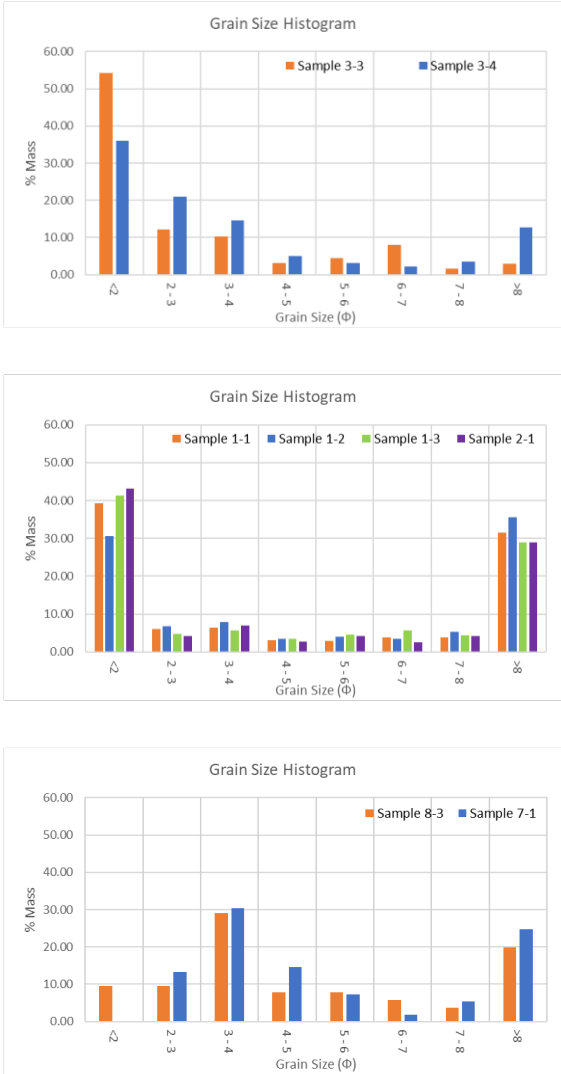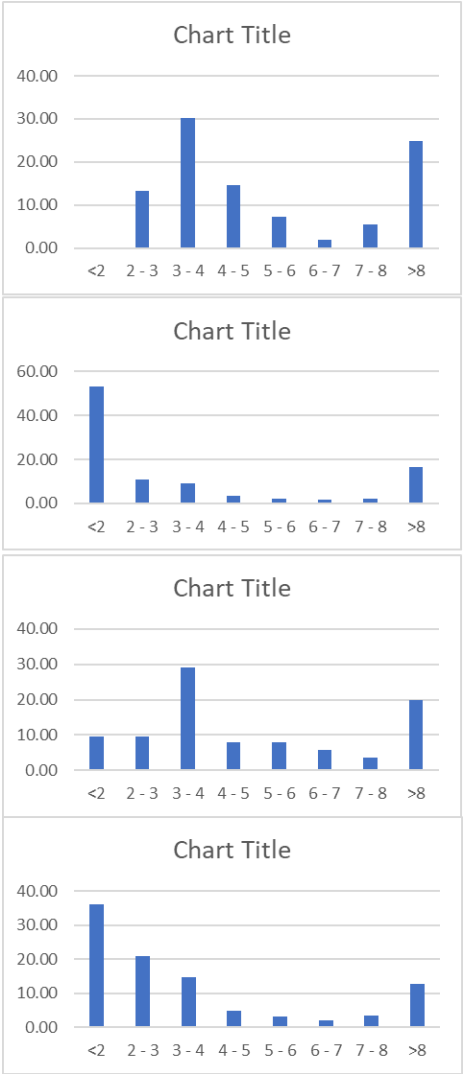
How to do it in a better way

- **Automate** data processing
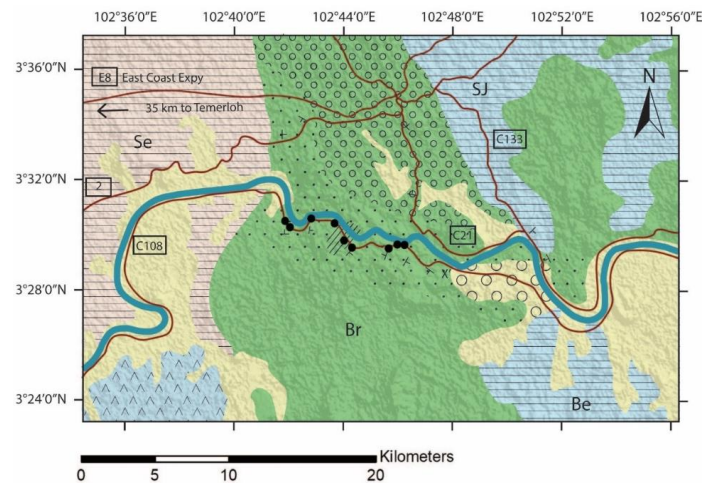
- Use statistical or unsupervised machine learning methods to perform **clustering and characterization**

- Leverage visualization tools to **communicate insights**

Have a look at the notebook in my Github repository:
https://github.com/jingtingchong/hobby_projects/blob/main/grain_size_analysis/grain_size.ipynb

Thank you