

MUSA650 Spring 2020, Week13

Case Study:

**Azavea-RasterVision,
An Open Source Framework
for
Deep Learning in Remote Sensing**



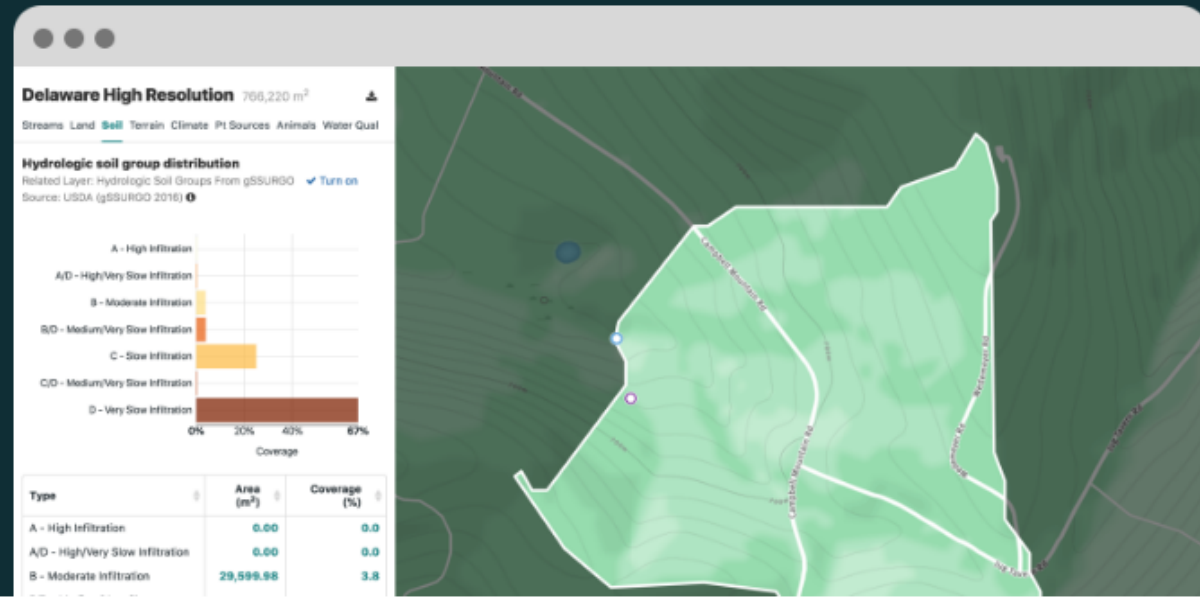
<https://www.azavea.com/>

About

We believe in the power of technology to improve communities and our planet. Since 2001, we have been stretching the possibilities of geospatial technology to enable our clients to answer complex questions in a wide range of domains: urban ecosystems, water, infrastructure planning, economic development, public transit, elections, public safety, energy, and cultural resources management, to name a few.

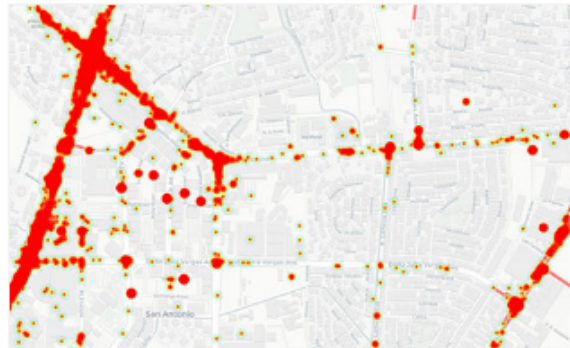
Geospatial technology for good

We build geospatial web applications, data analytics, and research tools to help you achieve impact.



Machine Learning and Big Data Address Agricultural Challenges in Africa

Supporting efforts to better understand agricultural patterns across Africa



Addressing the Global Epidemic of Road Crashes

An open source platform created in partnership with the World Bank to mitigate road accidents through road incident data management and analysis.



Raster Vision

An open source Python framework for building computer vision models on aerial, satellite, and other large imagery sets.



What We Do Research About Blog Careers Q

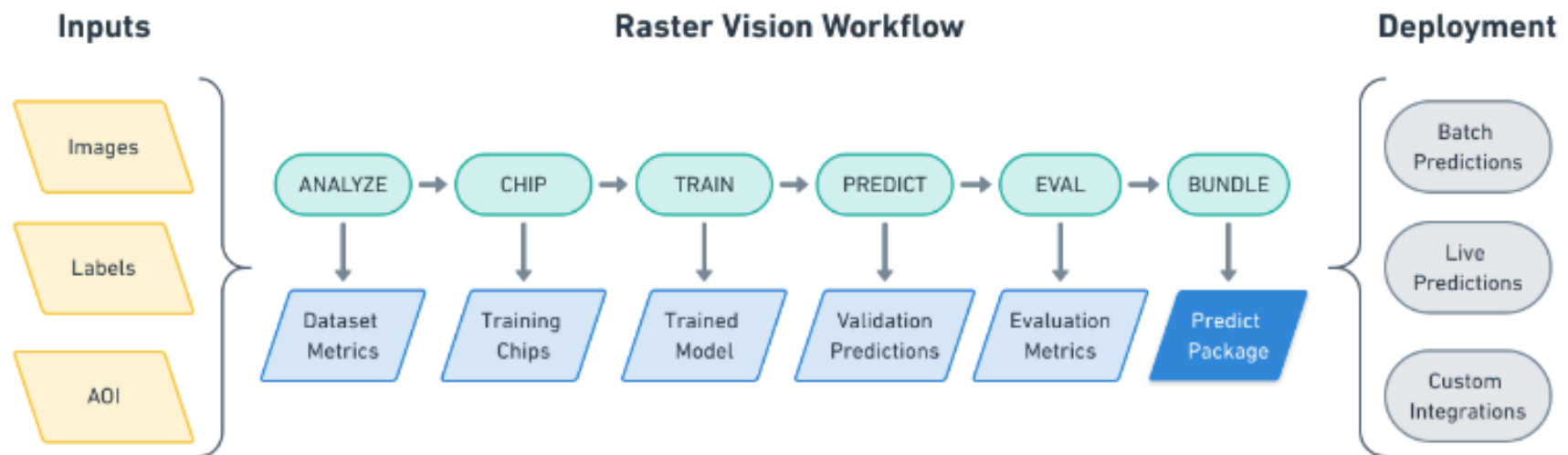
RASTER VISION

Deep learning for aerial and satellite imagery

An open source Python framework for building computer vision models on aerial, satellite, and other large imagery sets.



<https://rastervision.io/>



DEMO:

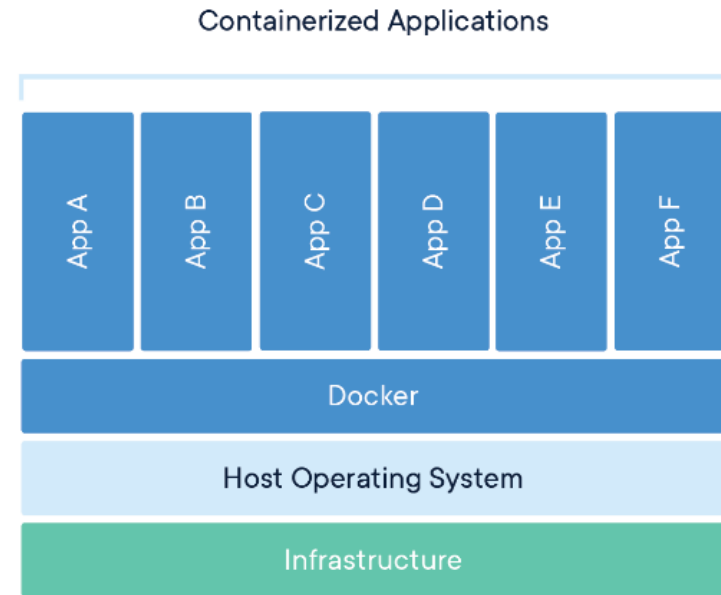
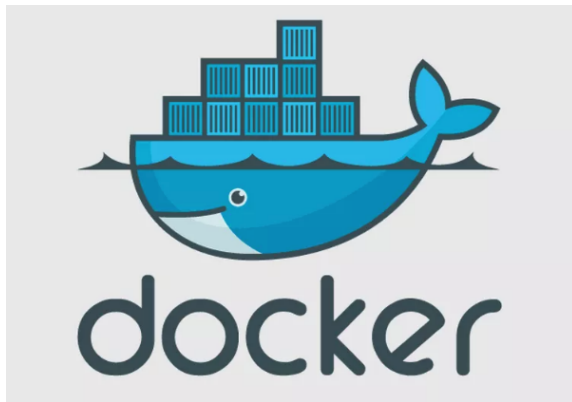
A practical Example; running Rastervision for Semantic Segmentation

Steps for running the experiment:

<https://docs.rastervision.io/en/0.10/quickstart.html>

Docker

An open-source project that automates the deployment of software applications inside “containers”



<https://docker-curriculum.com/>

<https://nickjanetakis.com/blog/comparing-virtual-machines-vs-docker-containers>

QGIS:

A Free and Open Source Geographic Information System



<https://qgis.org/en/site/>

https://docs.qgis.org/3.10/en/docs/user_manual/