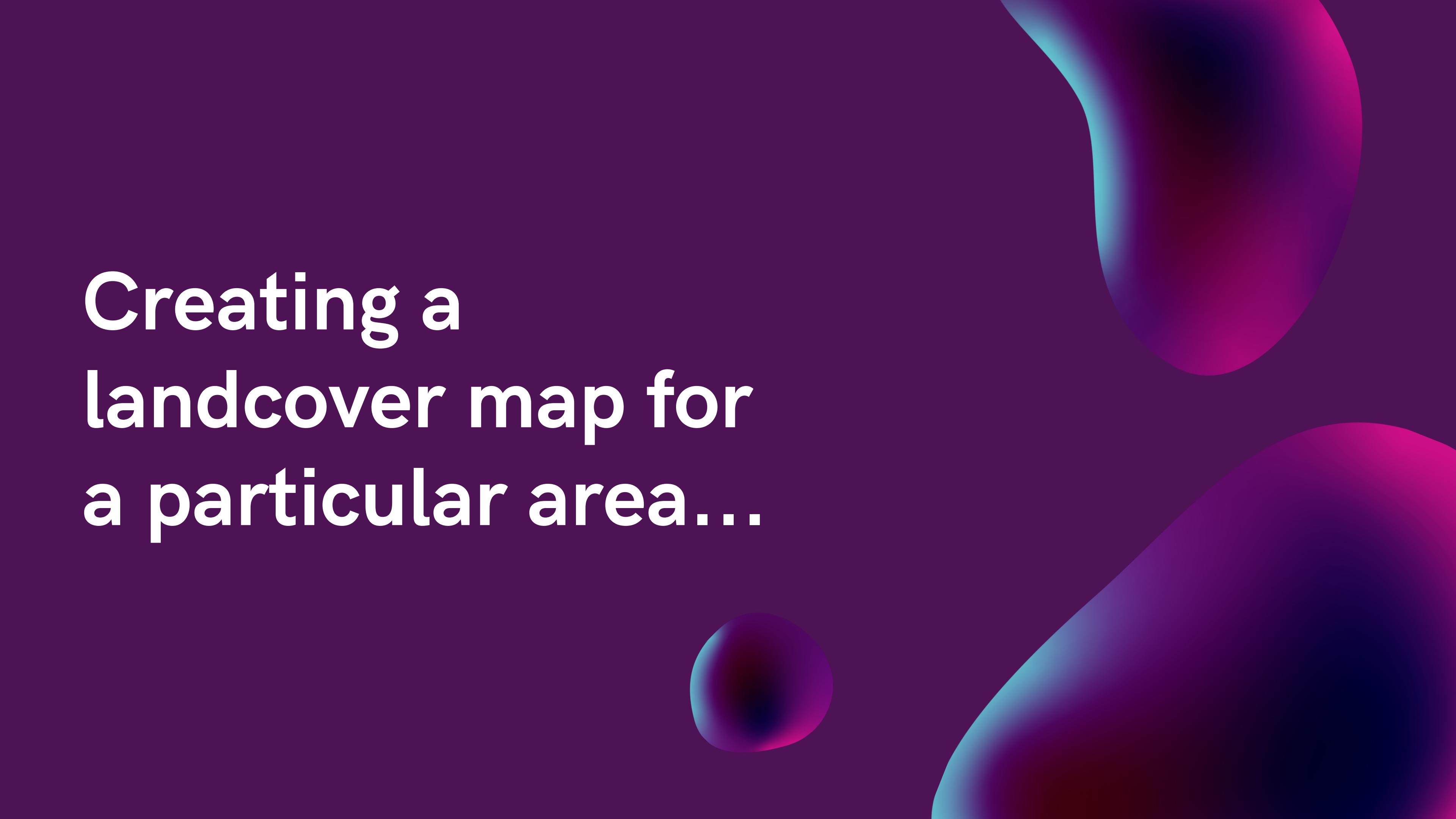


Satellite Image Processing



Problem Statement



Creating a
landcover map for
a particular area...

The background features three large, semi-transparent circles with a gradient from purple to blue. One circle is positioned at the top center, another is on the right side, and a third is at the bottom right corner.

**What's image
processing?**



- Digital image processing refers to the process of recognizing, making algorithmic enhancements and manipulating a digital image.
- In general, the technology deals with images that are two-dimensional entities (like satellite pictures, scanned documents etc) captured electronically. In the process, multiple computer algorithms are used by developers to solve different tasks.
- Here is some image processing examples: image detection, analysis, restoration.

Objective

- Takes a satellite image of a particular area
- Highlights the roads detected in that area
- Highlights the buildings detected in that area
- Highlights the vegetation in that area
- Creating landuse/landcover map of an area
- And some similar operations like those

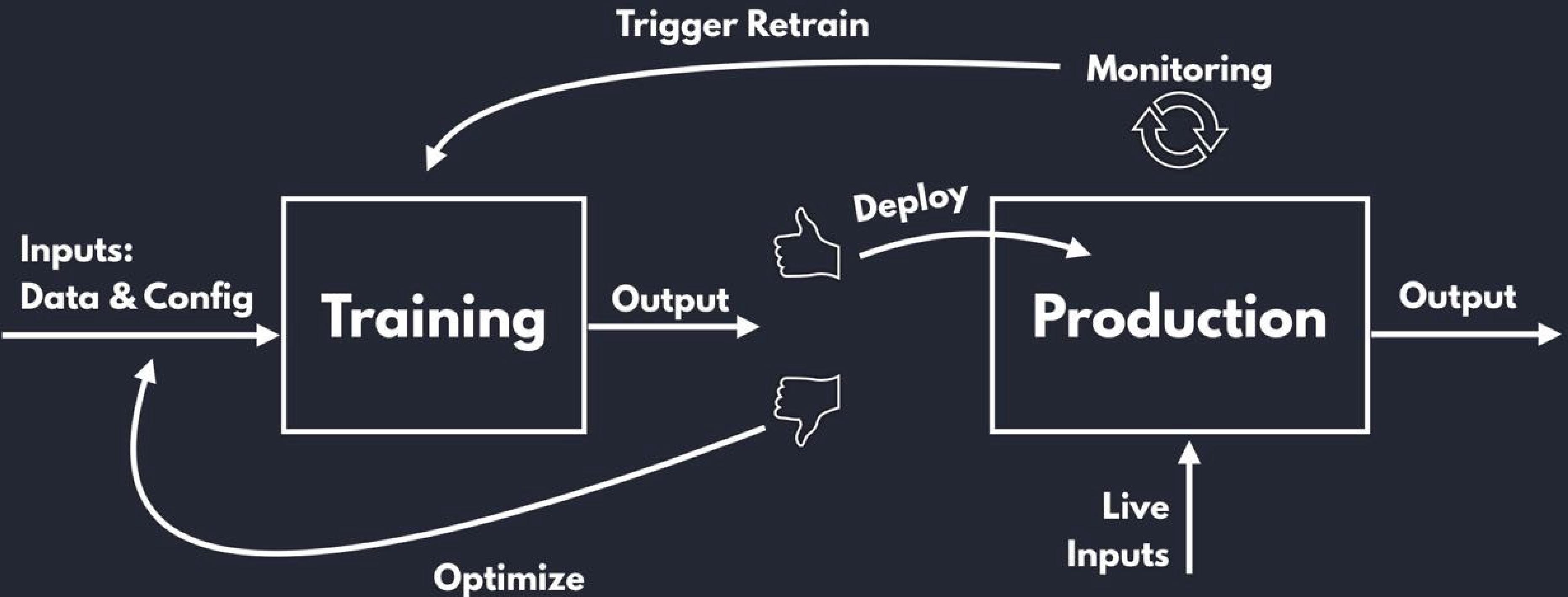
Application

- Providing a base map for reference
- Landuse/Landcover Mapping
- 3D GIS and City Models
- Applications in Mining
- Planning for disaster mitigation
- Applications in Agriculture and forestry
- Monitoring Climate Change



Workflow

Data Engineering for Data Scientists - Process



Thank You

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