# INTEL IMAGE CLASSIFICATION CHALLENGE

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# Problem Statement

◦ How can we build a machine learning model to classify images as either buildings, forest, glacier, mountains, streets, or the sea?

# Data Acquisition

◦ Images were acquired through Intel's Image Classification Challenge on Kaggle

◦ 6 Classes

◦ 14,041 Train images

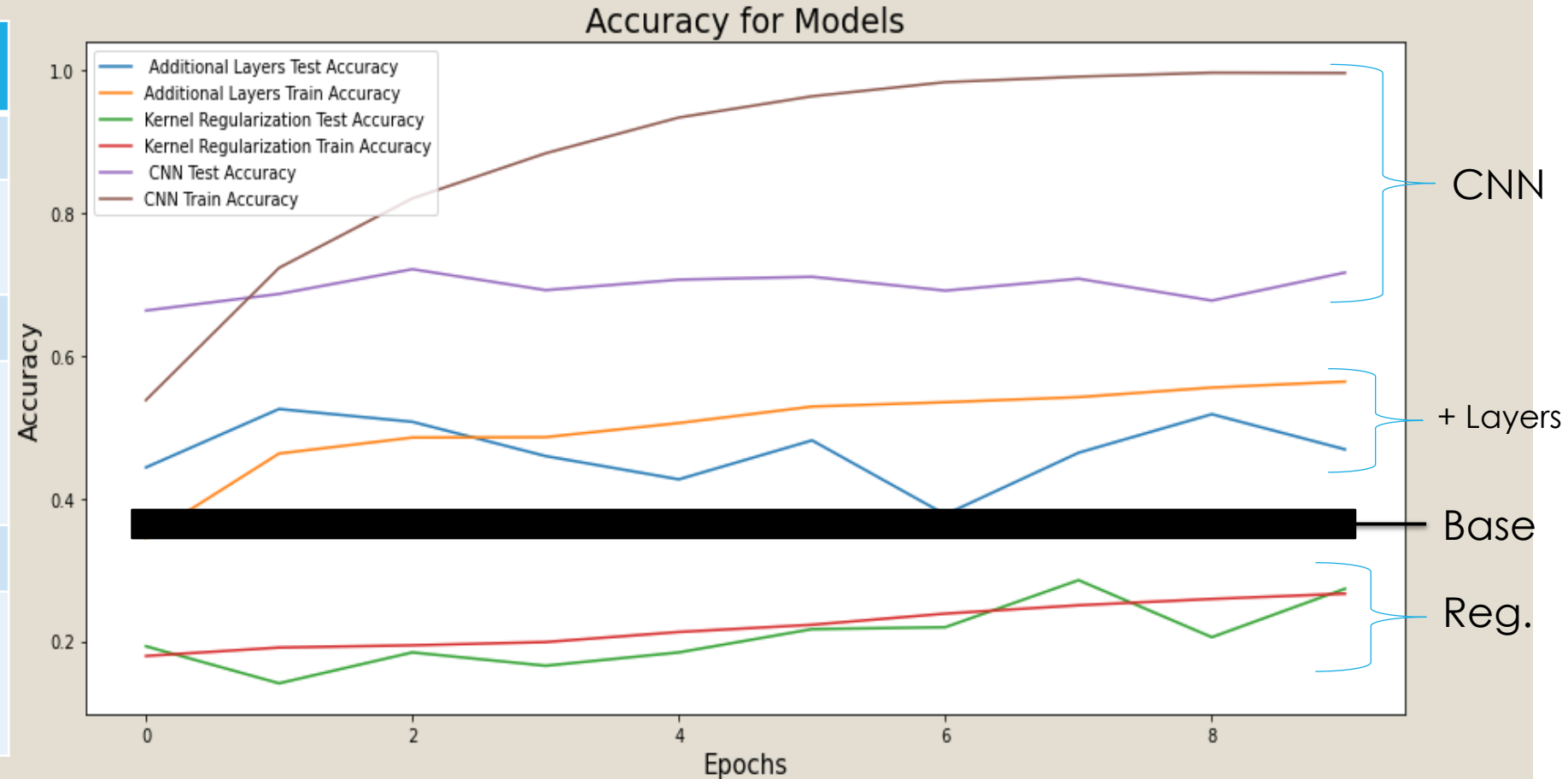◦ 3,000+ Test images

Forest

Mountain

Sea

Glacier

Building
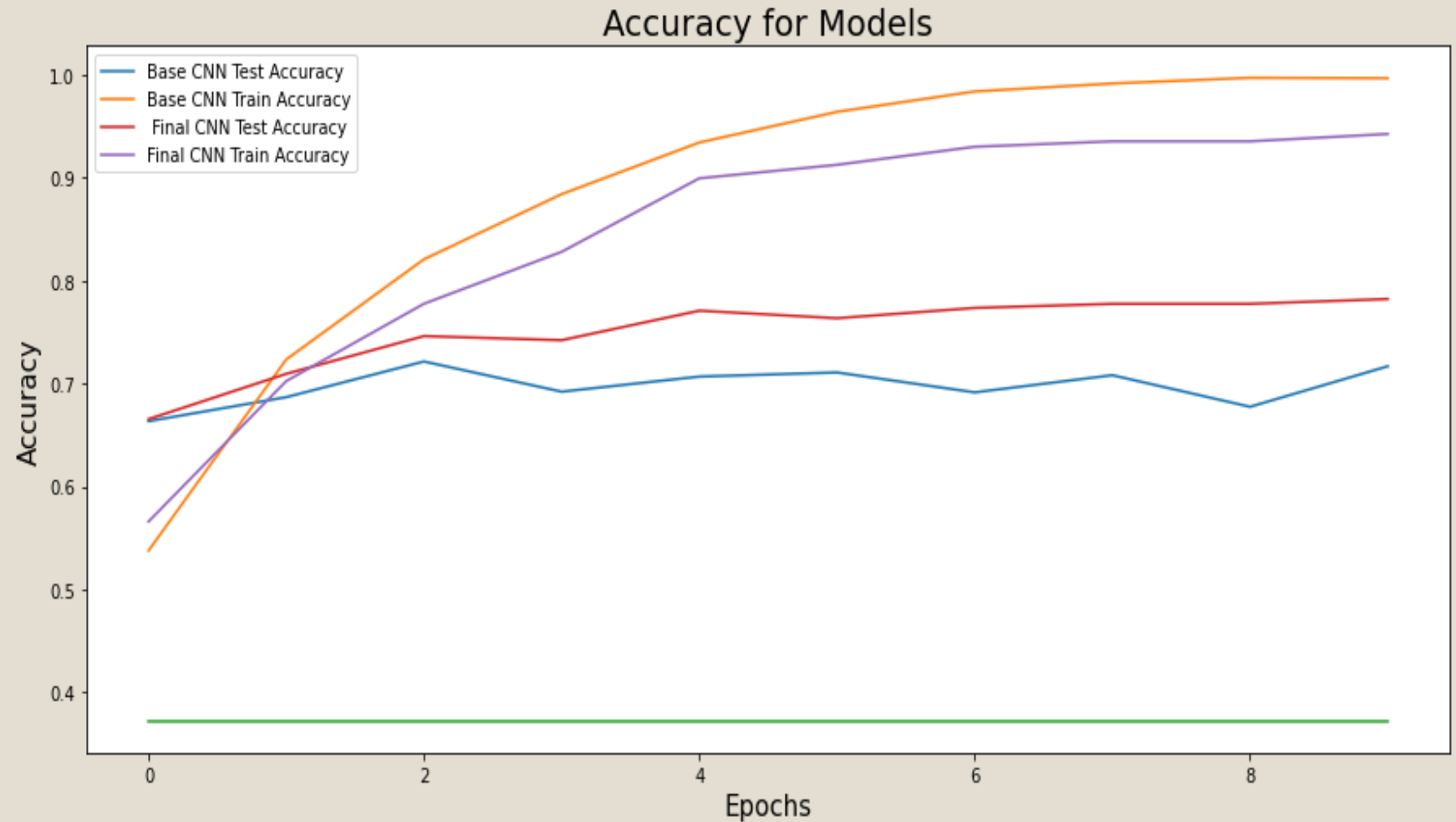
Street

# Method

| Model | Accuracy |
|-------|----------|
| Baseline | 0.384 |
| Additional Feature | 0.43 |
| Early Stop | 0.43 |
| Kernel Regularization | 0.29 |
| Drop Out | 0.43 |
| Convolution / Max Pooling | 0.70 |



Accuracy for Models

# Improvements & Best Model

- 2 Convolution layers
- 2 Max Pool layers
- Hidden Layer
- Learning Rate Reduction
- 0.78 VAL Accuracy



Accuracy for Models

# Demonstration

Streamlit APP Demo

# Thank You