

Overview

Friday, May 24, 2024

12:59 AM

- 1. Journey so Far**
- 2. Learning Curves**
- 3. Project Details**
- 4. Deployment**

Topics Covered

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- 1. Basics of Flask**
- 2. URL Building, Dynamic URLs**
- 3. HTML Templates, *Jinja* Template Engine, Template Inheritance**
- 4. Web Forms and Input Validation using *wtforms***
- 5. Databases - *SQLAlchemy* and *SQLite* Database**
- 6. Sessions**
- 7. Cookies**
- 8. Machine Learning Project - Training and Deployment**

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-
- ```
graph TD; Data --> Train["Train
(trains model)"]; Data --> Val["Val
(evaluation)"]; Data --> Test["Test
(reporting)"];
```

Train Data

[1 100 ... 800]

100 → T.S.1

200 → T.S.2

300

⋮

800 T.S.8

Val

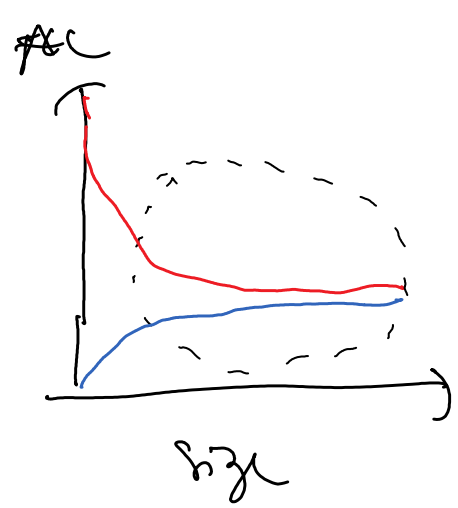
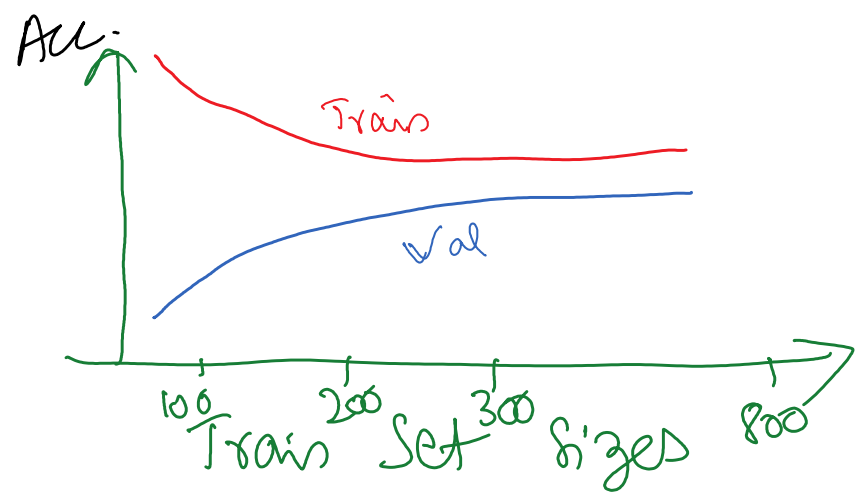
[1 ... 100 ... 200]

V.S.1

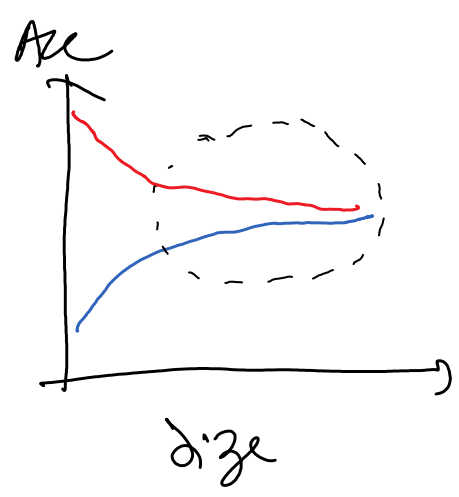
V.S.2

V.S.8

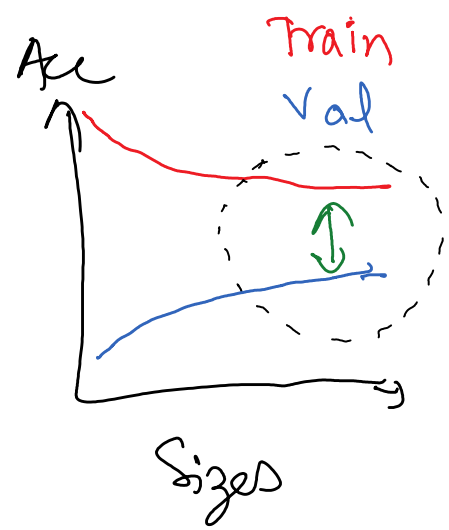
$\vdots$   
 $800 \rightarrow T.S-8 \quad V.S-8$



Under-fitting



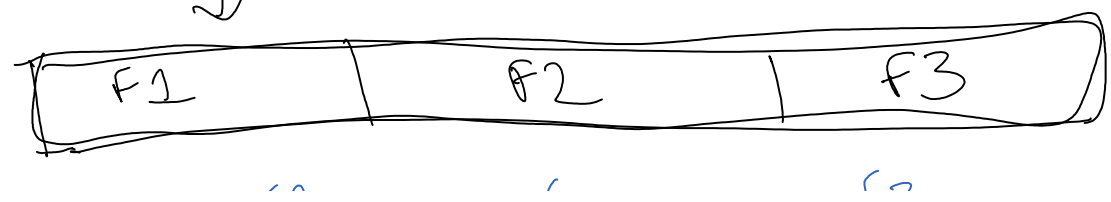
Good fit

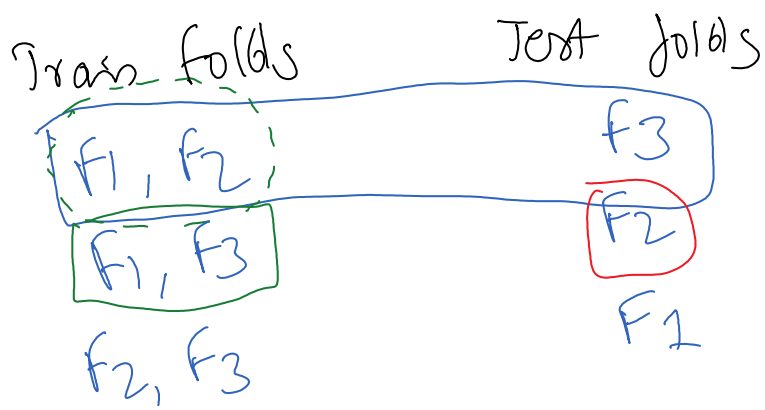
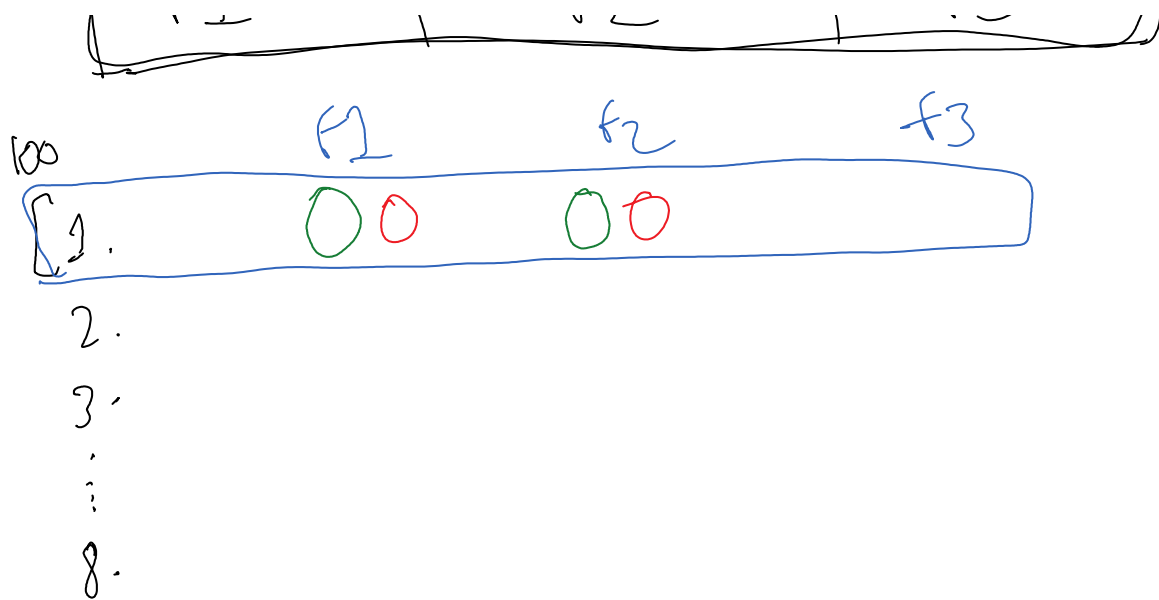


Over-fitting

Scikit-learn  $[cv=3]$

X-train  
↓





# Project Flow and Description

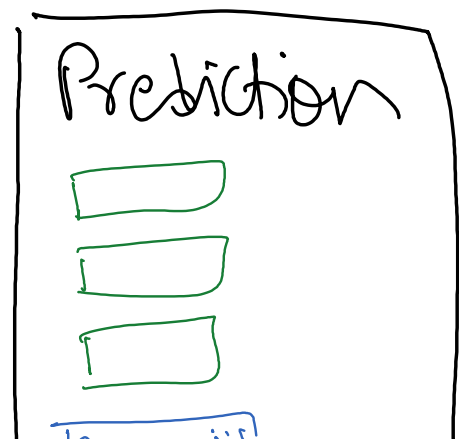
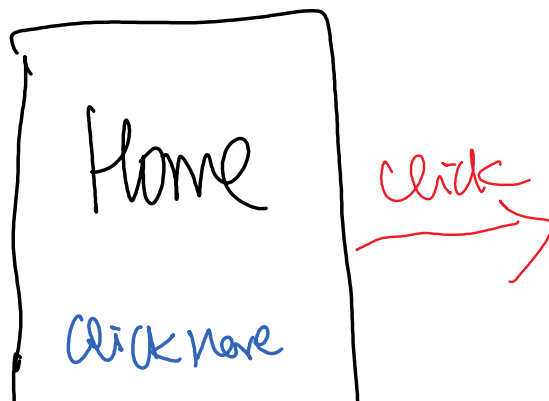
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Flight Prices  
Prediction

## Project Flow:

1. GitHub set-up ✓
2. Model Training: ✓
  - Gather and Split data
  - Data pre-processing
  - Model selection (Learning Curves)
  - Model training
  - Model persistence (saving) }
3. Create Input form ✓
4. Create the Application ✓
5. Create HTML templates ✓
6. Testing on Local Server ✓
7. Push changes to Remote Repository (GitHub) ✓
8. Deploy Application using Render ✓

## Project Description:



Click here

Project

1. Test local

2. Push Github

3. Deploy → Render