```
Start ──────────────▶ Analyse human
                      Level perfomance
                              │
                              ▼
                      Finalise qualifying
Define Test set,  ◀── And satisfying
Dev set,              metrics
Train set and Metrics
        │
        ▼
Train the model
        │
        ▼
Train it on train set
and evaluate it on
dev set
        │
        ▼
Train it on train set
and evaluate it
on dev set
     ╱        ╲
    ▼          ▼
Error Analysis    Bias Varience
                  Analysis
```

```
Bias Varience
Analysis
      |
      v
  Avoidable bias?  --Yes-->  Consider one of;
      |                      1. training more comples net
      No                     2. Use different optimization
      |                      3. train longer
      v
  High Varience?   --Yes-->  1. Consider a bigger
      |                          training set
      No                     2. Use regularization
      |                      3. change hyperparameters
      |                      4. Consider creating
      |                      train-dev set and ecaluate
      v
  Data mismatch?   --Yes-->  1. Consider arteficial
      |                          data augmentation
      No                     2. Analise difference between
      |                          dev and train set
      |                          and modify train set
      |                      3.In crease training set
      v
  Not performing   --Yes-->  1. Increase dev set
  well on test set           2. Change dev set
      |                      3. Change cost function
      No                     4. Change Metric
      |
      v
    Stop
```

```
┌─────────────────────┐
│   Error Analysis    │
└─────────────────────┘
          │
          ▼
┌───────────────────────────────┐
│  Get atleast 100 poorly inferred │
│   examples from the dev set    │
└───────────────────────────────┘
          │
          ▼
┌───────────────────────────────┐
│  Construct Error Analysis table │
│ which is a measure of the error in the │
│     Individual data point      │
└───────────────────────────────┘
          │
          ▼
┌───────────────────────────────┐
│ From this table consider the error by │
│ Solving which we will get maximum │
│      Model improvement         │
└───────────────────────────────┘
          │
          ▼
┌───────────────────────────────┐
│  Modify the dev and train set  │
│  Accordingly and train again.  │
└───────────────────────────────┘
```