**Slide 1:**

**Problem statement:**

Super resolution is the problem of artificially enlarging a low resolution image to recover a plausible high resolution version. Image Super Resolution (SR) is particularly useful in forensics, biometrics. This is a classical computer vision problem. We plan to implement a Deep Learning based approach to super resolve existing lower resolution images.

**Dataset:**

Low Resolution Images which are a part of DIV2K dataset provided by NTIRE 2017, 2018 challenges on Image Super-Resolution improvement. We use this dataset so as to compare our results with current state-of-the-art.

<https://data.vision.ee.ethz.ch/cvl/DIV2K/>

**slide 2:**

**State-of-the-art:**

**ESRGAN:**

1. removed all BN layers

2. replaced the original basic block with the proposed Residual-in-Residual Dense Block (RRDB).

3. Perceptual loss used before activated features

4. Relativistic Discriminator.

Batch size=16

Patch size=128x128

Trained on DIV2K dataset

**Slide 3:**

**Summary till Interim, Architecture**

**Slide 4:**

**Results and Analysis**

**Slide 5:**

**After Interim: current**

**Slide 6:**

**Architecture:**

**Slide 7:**

**Results and Analysis**

**Slide 8:**

**Results and Analysis**

**Slide 9:**

**Potential & plans, Individual contribution**

**Slide 10:**