

**Image Forgery Detection**

**Project Proposal**

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**Introduction:**

Image Forgery is the technique in which images pixels are manipulated to change the image or hide information. In today`s world where almost everyone use digital platforms and share their images, image forgery is the main concern for everyone. In our project, the main focus to detect image forgery by using Deep Learning techniques. Using these techniques, the analyzing image patterns and spotting of manipulations like splicing, copy-move, and retouching will be much more effective. The goal is to develop a tool that can reliably differentiate between genuine and altered images, making it useful for media verification and other practical applications.

**Scope:**

1. **Data Collection:**
   * We will use publicly available datasets. These datasets include a variety of genuine and forged images, and will be prepared and augmented to cover different forgery techniques.
2. **Model Development:**
   * We will implement and adapt various CNN architectures specifically for forgery detection.
3. **Detection Techniques:**
   * Our system will target common forgery methods, including splicing, copy-move, and retouching.
4. **Evaluation:**
   * The model’s performance will be assessed using accuracy and F1-score, ensuring it is reliable and effective.

**Conclusion:**

We will train CNN model and analyze its performance in the detection of image forgery from images. Our project has various real world applications like assisting in forensic analysis, countering disinformation and verifying images in media.