

SimCrackGAN

Synthesizing Semantic Crack Images Using Propagation Simulations and GANs



Dataset

The comprehensive dataset used in this study consists of **90,000 images** and is available for download. The dataset is organized into two main parts:

1. **Real-World / Ground Truth CFD Dataset (20,000 images):**
 - This is a collection of **10,000 real-world crack images** and **10,000 ground truth images**:
 - These images serve a dual role: they act as the **ground truth** for the GAN's training and generation process, and also as the dataset for **comparison and evaluation** of the model's performance.
2. **GAN-Generated Data (70,000 images):**
 - **10,000 image ground truth** generated by our primary GAN model.
 - **30,000 images** generated by the GAN with added noise.
 - **30,000 images** generated by the noise-free GAN.



Download the dataset here: [SimCrackGan Dataset](https://vnueduvn-my.sharepoint.com/:f:/g/personal/hieus_lecong_vnu_edu_vn/EoMKqKzNpmNFtrSHZkU_NB4Be6LQDFE7f0ycBqPz-T7Vfg?e=eghXlg)

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