

A Randomized Kernel-Based Secret Image Sharing Scheme — Supplementary —

Akella Ravi Tej Rekula Raviteja Vinod Pankajakshan
Indian Institute of Technology Roorkee, Uttarakhand, India

ravitej.akella@gmail.com rekula3@gmail.com vinodfec@iitr.ac.in

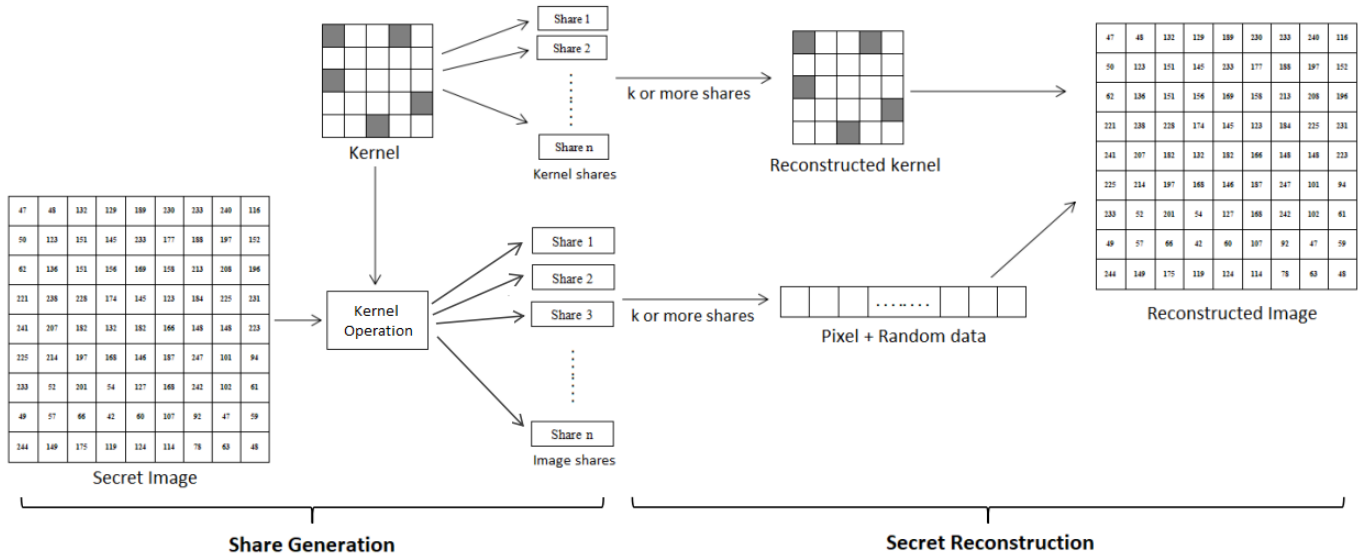


Figure 1: The proposed (k, n) scheme from share generation to secret reconstruction is described in the figure. Sharing the kernel not just prevents it from becoming SPOF, but also makes the scheme more secure. The kernel plays a vital role in the reconstruction of the secret image.

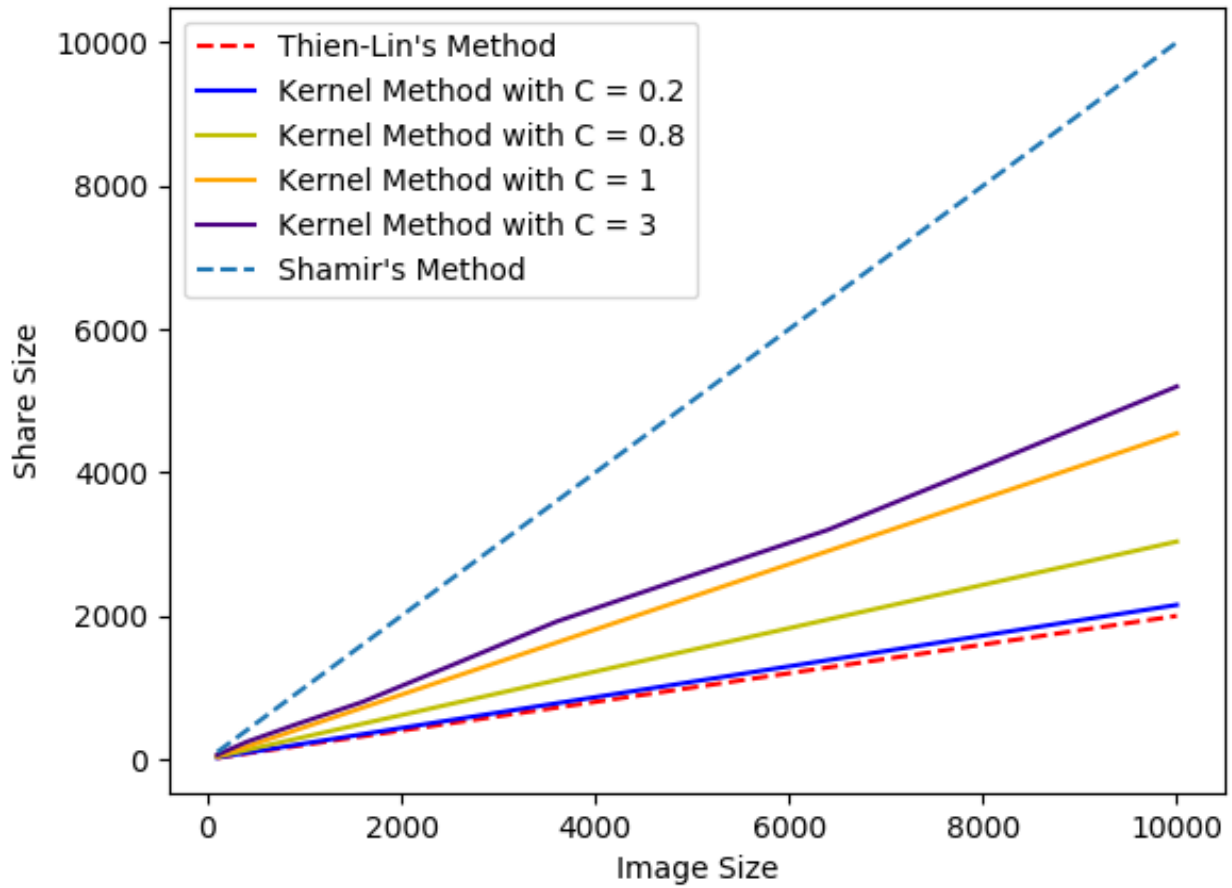


Figure 2: A comparison between share sizes of secret image sharing schemes in the literature and the proposed method. The dashed lines denotes the share sizes of Thien-Lin's method and Shamir's method, which are also the minimum and maximum theoretical limits for share size of our proposed kernel scheme, respectively. All the kernels are of 5×5 dimensions with $k = 5$.