SUBGRADIENT METHODS FOR CONVEX OPTIMIZATION PROBLEMS WITH APPLICATION TO IMAGE DENOISING AND DEBLURRING. Obed Amo, Department of Mathematics and Statistics, Old Dominion University. Subgradient methods, in particular, proximal gradient methods, are commonly used in non-smooth convex optimization. We examine the convergence rates of these techniques in the context of non-smooth objective functions. We also discuss how acceleration techniques can boost the convergence rates of subgradient methods. We further showcase broad applicability and practical importance of these methods for solving real-world problems in image denoising and deblurring. Author contact: oamo@odu.edu.