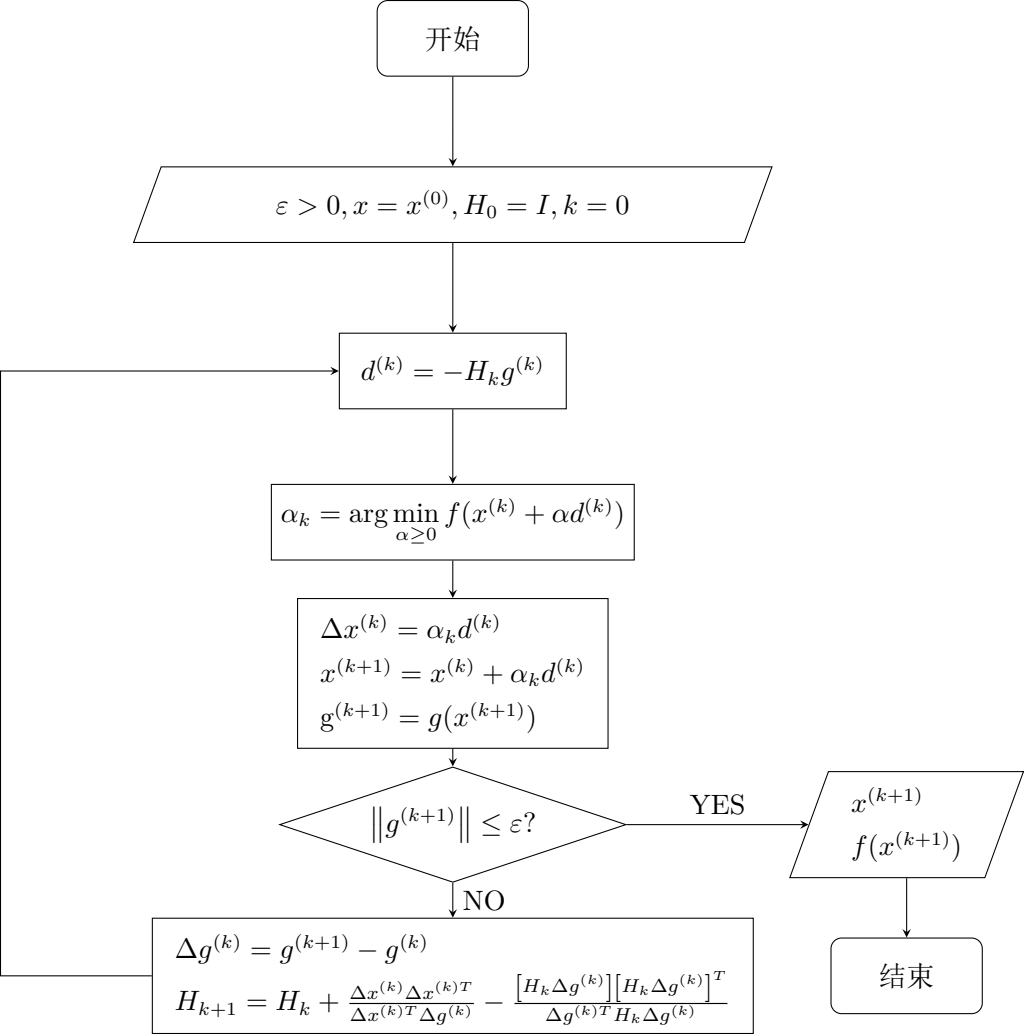
开始
$\varepsilon > 0, x = x^{(0)}, H_0 = I, k = 0$
$d^{(k)} = -H_k g^{(k)}$
$\alpha_k = \arg\min_{\alpha \geq 0} f(x^{(k)} + \alpha d^{(k)})$
$\Delta x^{(k)} = \alpha_k d^{(k)}$
$x^{(k+1)} = x^{(k)} + \alpha_k d^{(k)}$
$\mathrm{g}^{(k+1)} = g(x^{(k+1)})$
$\left\| g^{(k+1)} \right\| \leq \varepsilon ?$
YES
$x^{(k+1)}$
$f(x^{(k+1)})$
NO
$\Delta g^{(k)} = g^{(k+1)} - g^{(k)}$
$H_{k+1} = H_k + \frac{\Delta x^{(k)} \Delta x^{(k)T}}{\Delta x^{(k)T} \Delta g^{(k)}} - \frac{\left[H_k \Delta g^{(k)}\right]\left[H_k \Delta g^{(k)}\right]^T}{\Delta g^{(k)T} H_k \Delta g^{(k)}}$
结束