$$\begin{cases} \frac{\mathrm{d}}{\mathrm{d}R_0}\sum_{k=1}^{N}(\Delta V(k) - V_{\mathrm{OCV}} - I(k)\cdot R_0)^2 = 0 \end{cases}$$

$$R_0 = \frac{-N\cdot\sum_{k=1}^{N}[I(k)\cdot\Delta V(k)]+\sum_{k=1}^{N}I(k)\cdot\sum_{k=1}^{N}[\Delta V(k)]}{\left(\sum_{k=1}^{N}I(k)\right)^2 - N\cdot\sum_{k=1}^{N}[I(k)^2]}$$