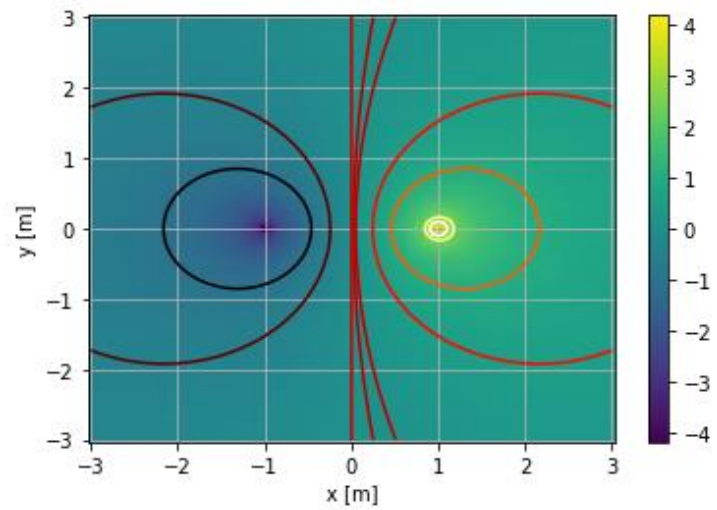


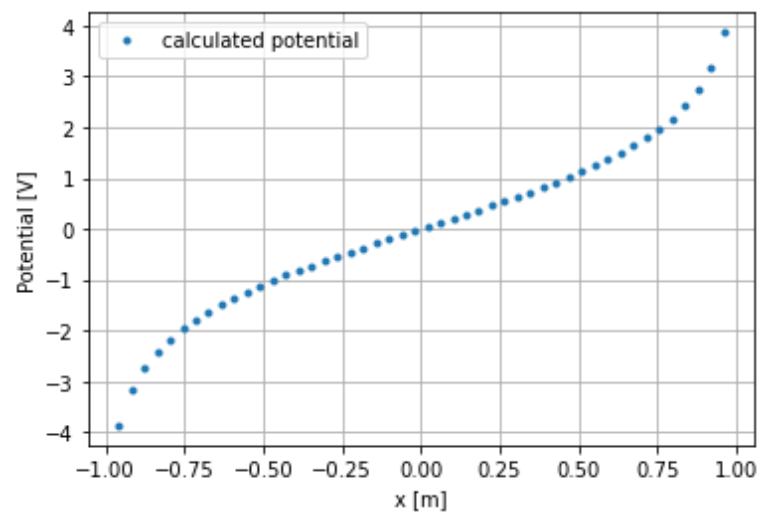
פתרון תרגיל פייתון

פוטנציאל חשמלי:

סעיפים 5-7:



סעיף 8:

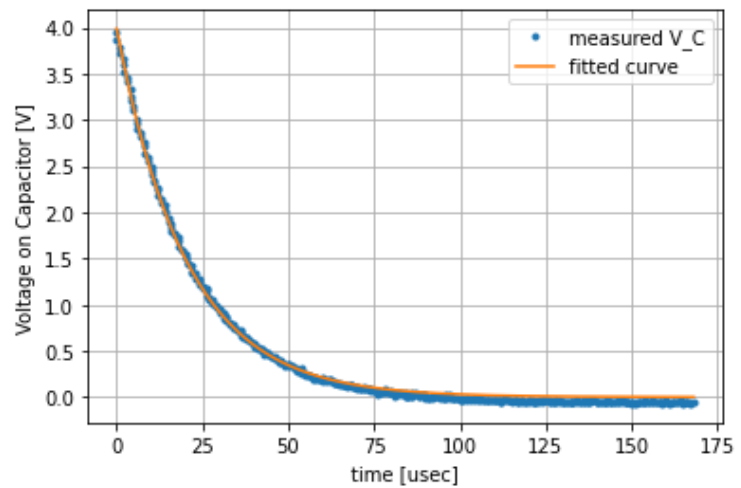


קבל:

סעיף 2: $C_{\text{theoretical}} = 4.5 \times 10^{-10} \text{ F}$

סעיף 3: $\tau_{\text{theoretical}} = 1.73 \times 10^{-5} \text{ sec}$

סעיף 7:



סעיף 11:

$V0_{\text{fit}} = 3.99 \text{ V}$

$\tau_{\text{fit}} = 2.044 \times 10^{-5} \text{ sec}$

סעיף 12:

$V0_{\text{fit_err}} = 0.01 \text{ V}$

$\tau_{\text{fit_err}} = 8 \times 10^{-8} \text{ sec}$

סעיף 15:

$\chi^2 = 267.5$

$\text{DoF} = 418$

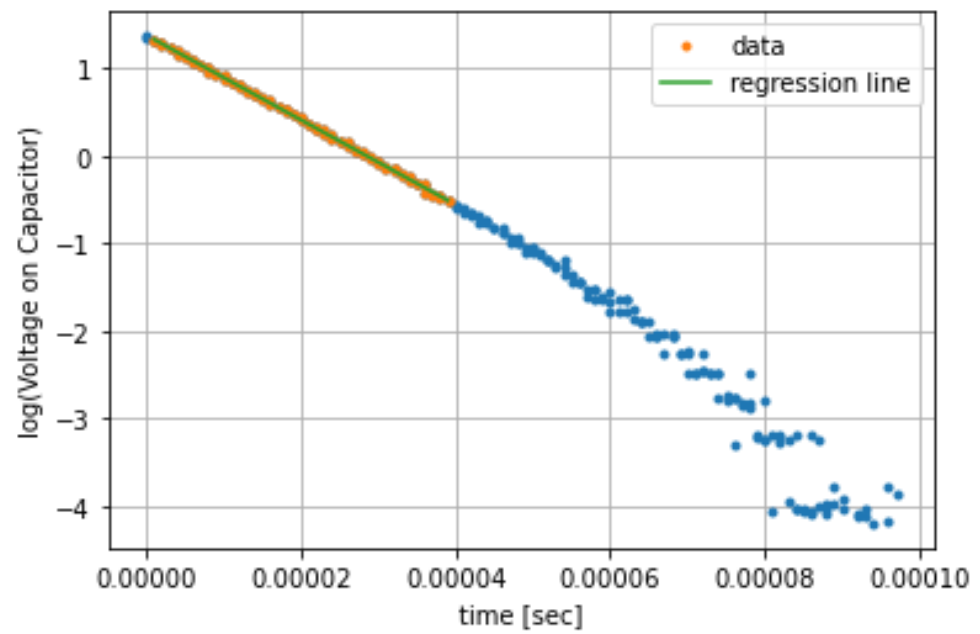
סעיף 16:

$p\text{-value} \approx 1$

סעיף 17:

$R_{\text{squared_of_fit}} = 0.998$

סעיף 18:



סעיף 22:

$$V0_reg = 3.98 \text{ V}$$

$$\tau_{reg} = 2.067e-5 \text{ sec}$$

סעיף 23:

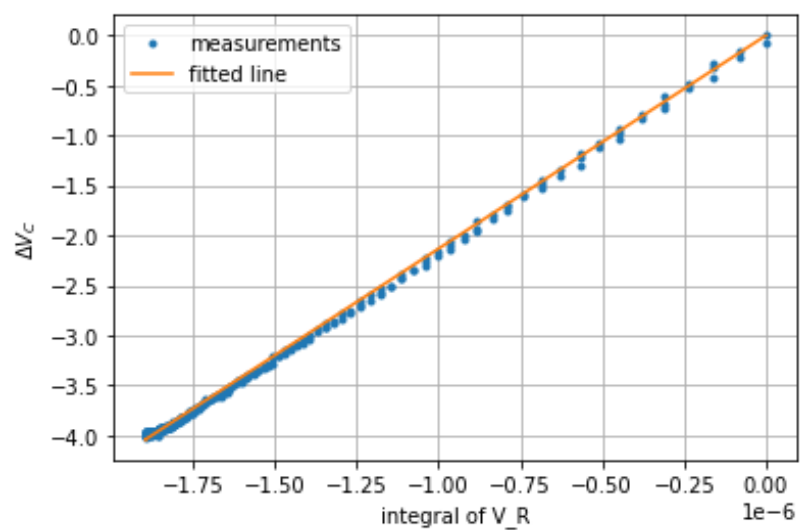
$$V0_reg_err = 0.02 \text{ V}$$

$$\tau_{reg_err} = 7e-8 \text{ sec}$$

סעיף 24:

$$R_squared_of_reg = 0.999$$

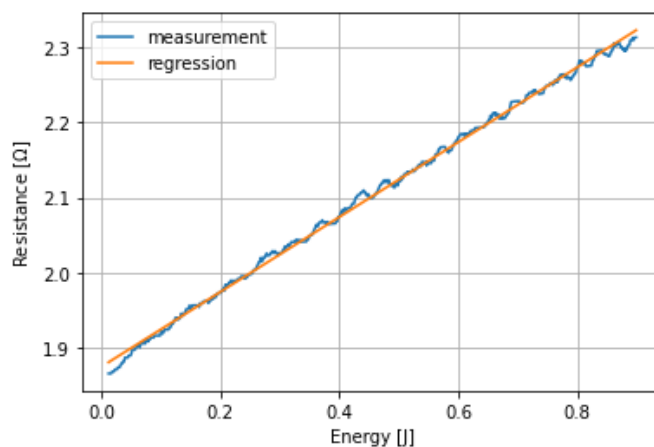
סעיף 27:



$$C_meas = 4.8e-10 \text{ F} \quad \text{סעיף 28:}$$

חוק אוהם

סעיף 12:



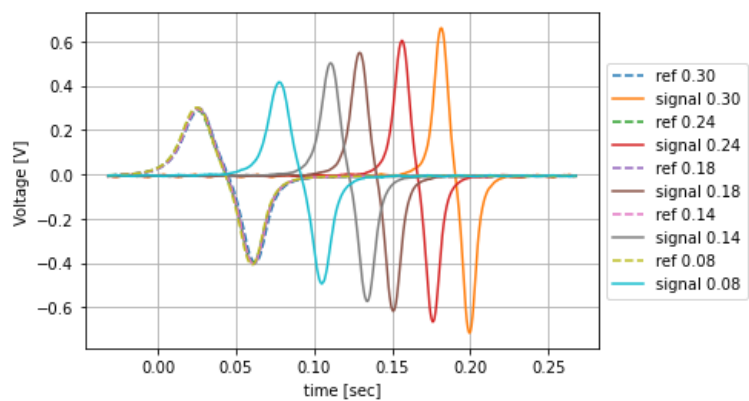
סעיף 14:

$$R_0 = 1.88 \text{ ohm}$$

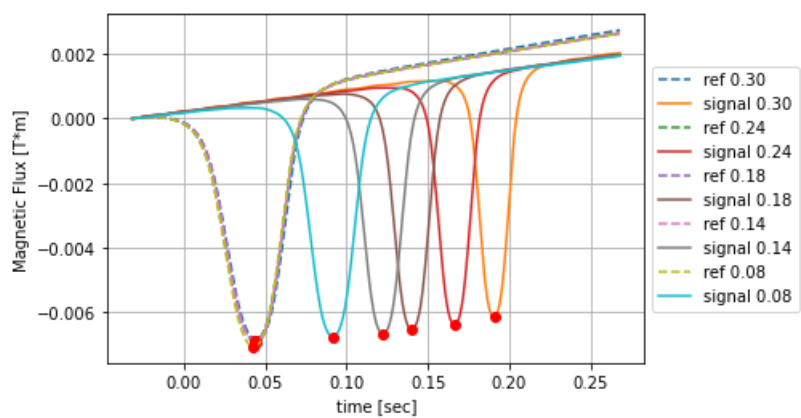
$$\text{Alpha_over_C_heat} = 0.26 \text{ 1/J}$$

השראות:

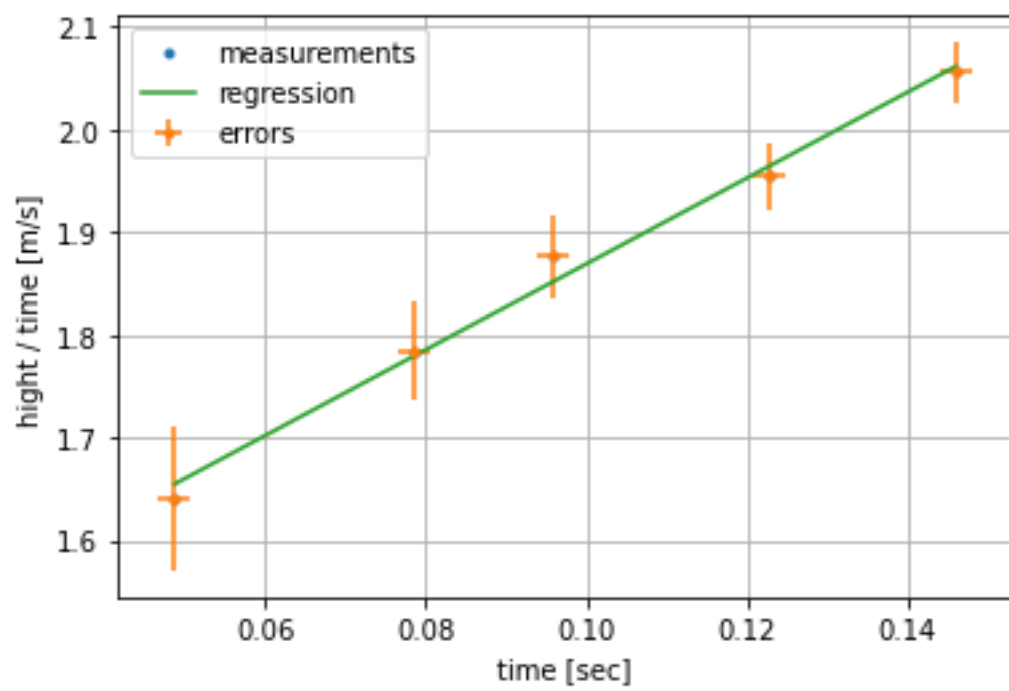
סעיף 5:



סעיף 7:



סעיף 12:



סעיף 14:

$v_0 = 1.45 \text{ m/sec}$

$a = 8.36 \text{ m/sec}^2$

סעיף 16:

$R_{\text{squared_reg}} = 0.99$

סעיף 17:

$\text{Chi_squared} = 0.518$

$\text{Dof} = 3$

$p\text{-vaule} = 0.915$