Hardware Assignment

PT-100 (AI-ML)

TRAINING DATA: VALIDATION DATA: After training the ARDIUNO, the

Temperature (°C)	Voltage (V)
31.9	4.617
43.5	4.628
54.1	4.637
62.7	4.647
74.6	4.657
81.6	4.665
81.9	4.662
86.6	4.670
91.6	4.673
93.8	4.674

TABLE I: Training Data

Temperature (°C)	Voltage (V)
58.6	4.643
65.3	4.649
71.3	4.652
78.7	4.661
83.6	4.665

TABLE II: Validating Data

Callendar-Van Dusen equation comes out to be :

$$V(T) = 4.52171132 + \left(2.01541525 \times 10^{-3}\right)T - \left(8.15375669 \times 10^{-6}\right)T^2 \tag{1}$$

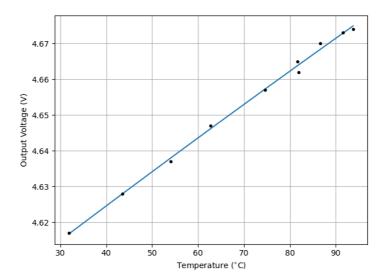


Fig. 1: Training the Model

VALIDATION:

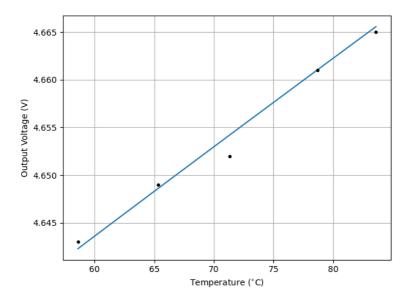


Fig. 2: Validation