Worm / No‑Worm Training Report

|  |  |
| --- | --- |
| Visual verification of input data | [add your own notes] |
| Data splits | Train: 8691, Validation: 2173 (20%) |
| Input image size | 101×101 pixels |
| Image preprocessing | CLAHE → median‑blur(3) → Canny edges blended (0.8/0.2) |
| Logistic regression parameters | learning‑rate=0.1, epochs=60, batch=256, weights init ~𝒩(0,0.01) |
| Optimizer | Stochastic Gradient Descent (hand‑coded) |
| Confusion matrix | [[965 135]  [163 910]] |
| Training time (s) | 41.15 |
| Testing time (s) | 0.0260 |
| Validation accuracy | 0.8629 |
| Classification report | precision recall f1-score support   0 0.8555 0.8773 0.8662 1100  1 0.8708 0.8481 0.8593 1073   accuracy 0.8629 2173  macro avg 0.8632 0.8627 0.8628 2173 weighted avg 0.8631 0.8629 0.8628 2173 |