

DAFTAR GAMBAR

Gambar 2. 1 Kecerdasan Buatan (<i>Artificial Intelligence</i>)[22]	16
Gambar 2. 2 <i>Deep Learning</i> [26]	17
Gambar 2. 3 Arsitektur <i>Convolutional Neural Network</i> (CNN)[28].....	18
Gambar 2. 4 Arsitektur YOLOv8 [18]	19
Gambar 2. 5 <i>Face Recognition</i> [31].....	20
Gambar 2. 6 <i>Computer Vision</i> [33]	21
Gambar 2. 7 Presensi SDN Galor 1 Purbalingga	21
Gambar 2. 8 Platform Roboflow	22
Gambar 2. 9 Notebook Google Colab	23
Gambar 2. 10 Python[37]	23
Gambar 2. 11 Pycharm	24
Gambar 2. 12 Implementasi Flask	25
Gambar 2. 13 SQLite[41].....	26
Gambar 2. 14 <i>Website</i>	26
Gambar 2. 15 HTML[44]	27
Gambar 2. 16 CSS [45]	28
Gambar 2. 17 JavaScript[47]	29
Gambar 3. 1 Diagram Alir Penelitian	39
Gambar 3. 2 Contoh Data Latih	42
Gambar 3. 3 Input Data	43
Gambar 3. 4 Labelling.....	43
Gambar 3. 5 Split Dataset.....	44
Gambar 3. 6 Detail Data Preprocessing dan Augmentasi.....	44
Gambar 3. 7 Format <i>Modelling</i> YOLOv8	45
Gambar 3. 8 <i>Use Case Diagram</i>	53
Gambar 3. 9 <i>Activity Diagram</i> Presensi Otomatis	62
Gambar 3. 10 <i>Activity Diagram</i> Login Admin	63
Gambar 3. 11 <i>Activity Diagram</i> Kelola Jadwal Bulanan	65
Gambar 3. 12 <i>Activity Diagram</i> Kelola Data Absensi.....	66
Gambar 3. 13 <i>Class Diagram</i> Sistem Absensi Otomatis	67
Gambar 3. 14 <i>Wireframe</i> Halaman <i>Admin Panel</i>	68
Gambar 3. 15 <i>Wireframe</i> Halaman Cek Absensi (Tanpa Login)	69
Gambar 3. 16 <i>Wireframe</i> Halaman Login Admin	69
Gambar 3. 17 <i>Wireframe</i> Halaman Ubah Password	70
Gambar 3. 18 <i>Wireframe</i> Halaman Admin Panel.....	70
Gambar 3. 19 <i>Wireframe</i> Halaman Atur Jadwa	71
Gambar 4. 1 Proses Impor <i>Dataset</i> dari RoBoFlow.....	73
Gambar 4. 2 Ringkasan Arsitektur YOLOv8.....	74
Gambar 4. 3 <i>Hasil Training Model</i> YOLOv8	74
Gambar 4. 4 Grafik Evaluasi	76
Gambar 4. 5 Nilai <i>mAP</i> , <i>Precision</i> , dan <i>Recall</i>	76
Gambar 4. 6 <i>Confusion Matrix</i>	78
Gambar 4. 7 <i>Deployment Model</i> ke Dalam Aplikasi.....	79

Gambar 4. 8 Fitur Sistem Absensi Otomatis	79
Gambar 4. 9 Fitur Cek Absensi Tanpa <i>Login</i>	80
Gambar 4. 10 Fitur <i>Admin Panel</i>	80
Gambar 4. 11 Fitur Atur Jadwal.....	81
Gambar 4. 12 Fitur Atur Login.....	82
Gambar 4. 13 Fitur Ubah Password	82