Ethical AI Validator - Compliance Report

Report Information

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Model Information

model_name: Logistic Regression
config_name: default
version: 1.0

Audit Criteria

bias_threshold	0.1
fairness_threshold	0.8

Bias Analysis Results

Protected Attribute	Group	Bias Score
gender	female	0.198
gender	male	0.256
age_group	18-25	0.198
age_group	26-35	0.198
age_group	36-50	0.551
age_group	50+	0.138
education	bachelor	0.194
education	high_school	0.562
education	master	0.198
education	phd	0.198

Fairness Assessment Results

Protected Attribute	Fairness Score
gender	0.772
age_group	0.713
education	0.740

Overall Compliance Summary

Overall Status	NON-COMPLIANT
Bias Issues	Yes
Fairness Issues	Yes
Total Issues	2
Summary	Significant issues detected. Immediate action required for compliance.

GDPR Compliance Assessment

Requirement	Status	Notes
Data Minimization	Compliant	Audit completed successfully
Purpose Limitation	Compliant	Audit completed successfully
Transparency	Non-Compliant	Bias detected - transparency compromised
Accountability	Non-Compliant	Fairness issues - accountability concerns
Right to Explanation	Non-Compliant	Bias/fairness issues affect explainability

AI Act Compliance Assessment

Requirement	Status	Notes
Risk Assessment	Non-Compliant	Bias/fairness risks identified
Transparency Requirements	Non-Compliant	Bias affects transparency
Human Oversight	Non-Compliant	Bias/fairness issues require oversight

Accuracy Requirements	Non-Compliant	Fairness issues affect accuracy
Documentation	Non-Compliant	Bias/fairness issues need documentation

Recommendations

1: CRITICAL: Implement immediate bias mitigation strategies
2: Consider retraining model with fairness-aware algorithms
3: MEDIUM: Monitor fairness in gender
4: MEDIUM: Monitor fairness in age_group
5: MEDIUM: Monitor fairness in education
6: Implement comprehensive bias monitoring in production
7: Document all mitigation strategies implemented
8: Establish regular bias monitoring procedures
9: Provide model explanations for affected groups
10: Consider human oversight for high-stakes decisions