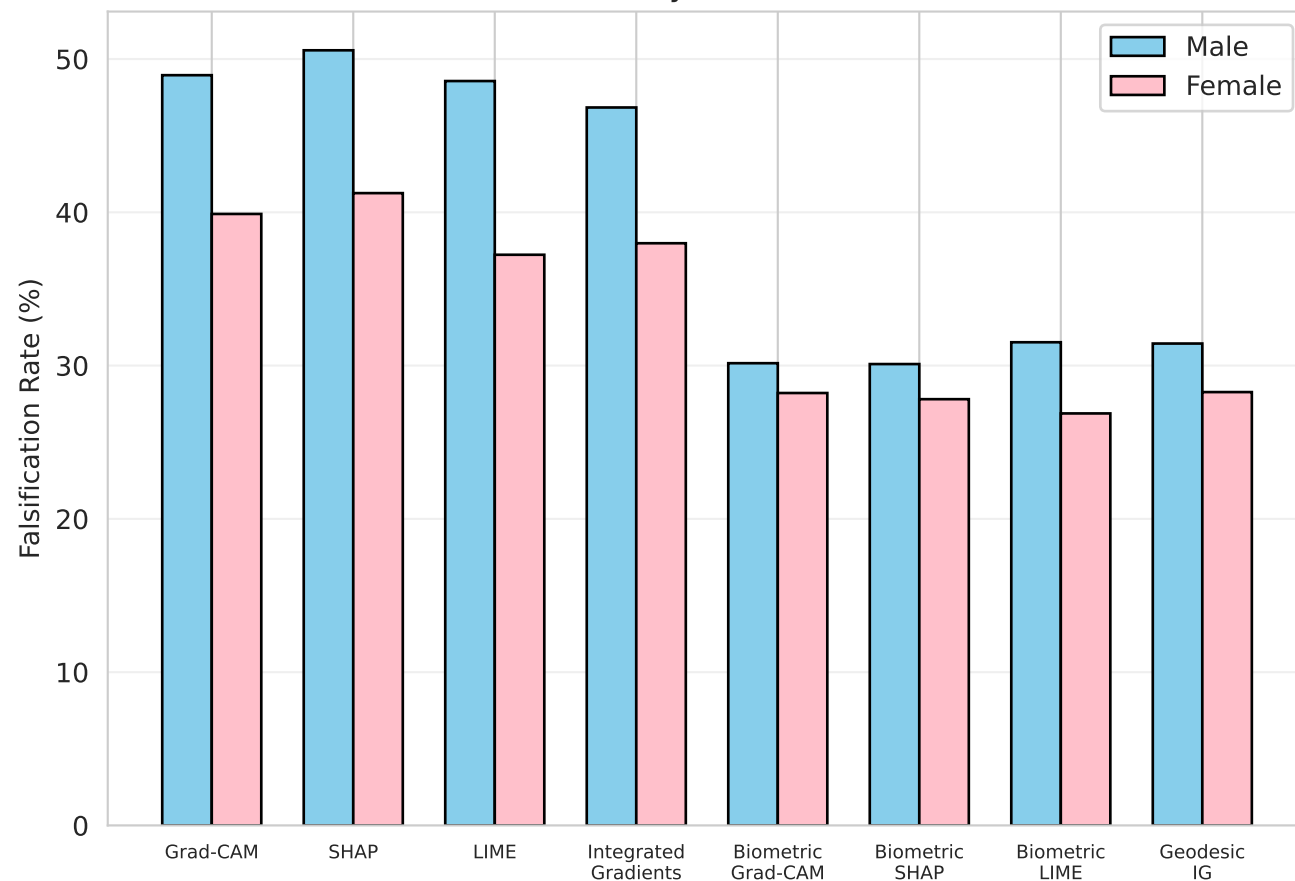
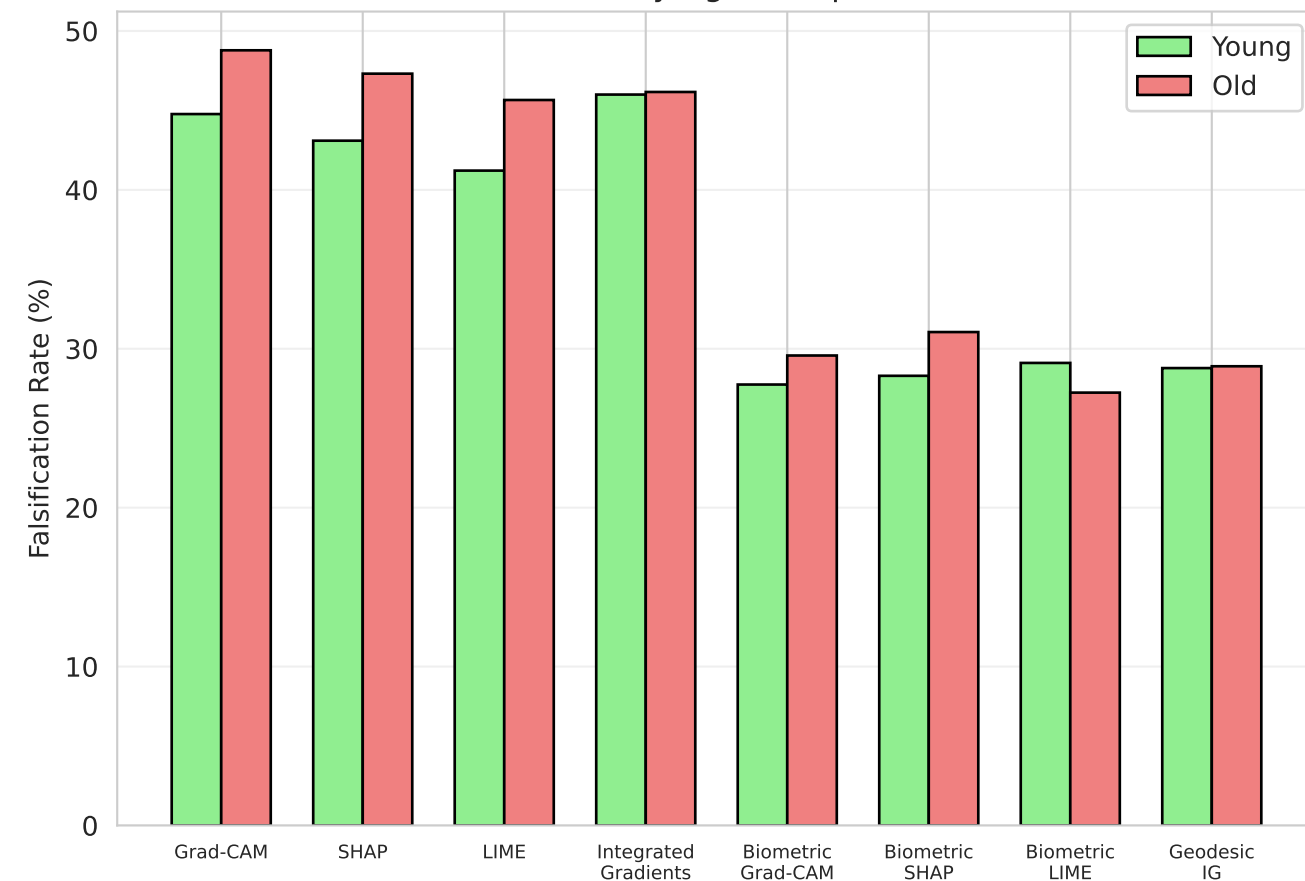


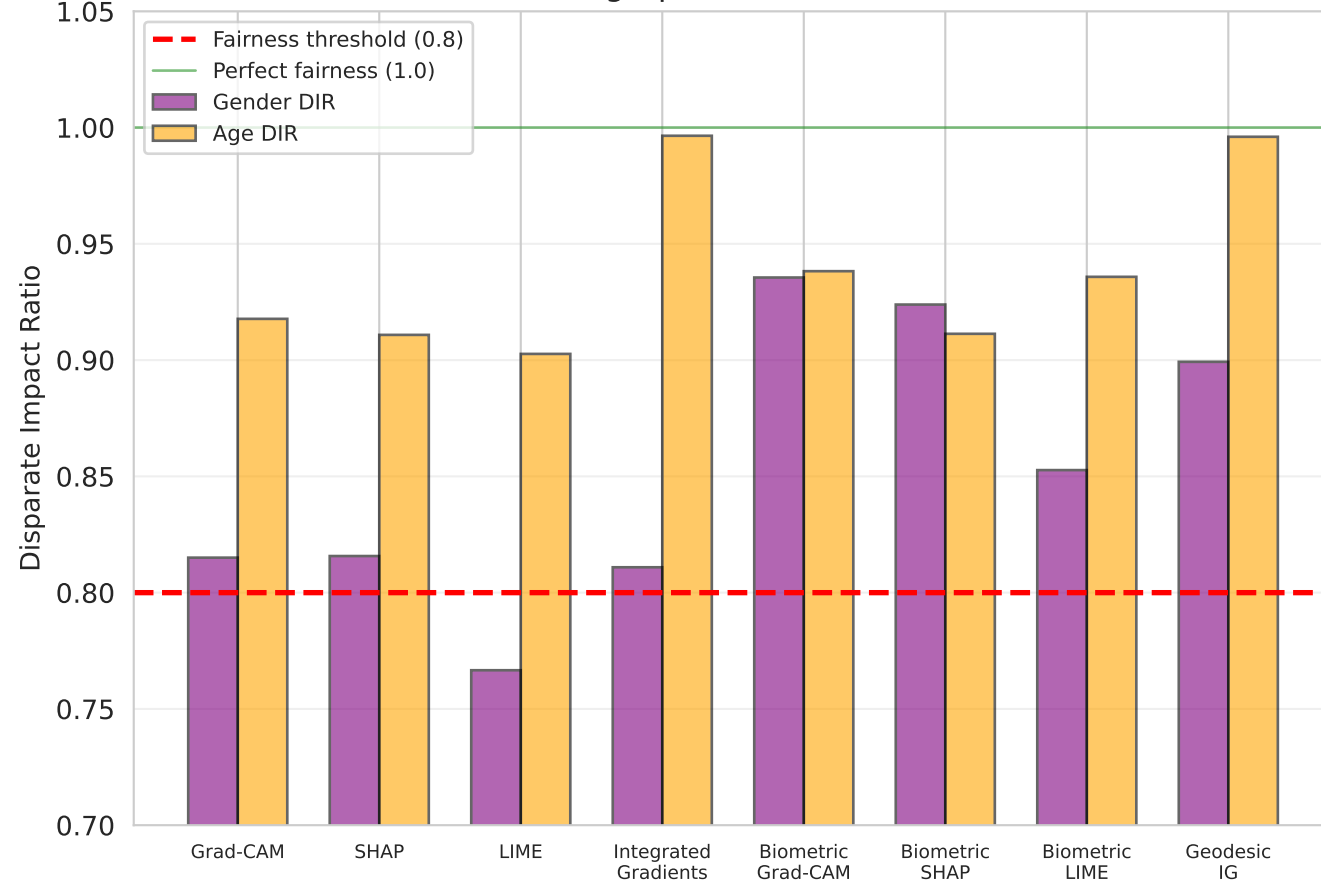
FR by Gender



FR by Age Group



Demographic Fairness (DIR)



DEMOGRAPHIC FAIRNESS SUMMARY

Standard XAI Methods:

Avg Gender DIR: 0.80

Avg Gender gap: 9.6%

Biometric XAI Methods:

Avg Gender DIR: 0.90

Avg Gender gap: 3.0%

Improvement:

DIR improvement: 12.6%

Fairness Interpretation:

DIR ≥ 0.8 : Meets fairness thresholdDIR ≈ 1.0 : Perfect demographic parity

Result: Biometric methods promote more equitable evaluation