

# Fairness Interventions Across the ML Pipeline

## Fairness Metrics

Demographic Parity

Equal Opportunity

Equalized Odds

Individual Fairness

### Pre-processing

### In-processing

### Post-processing

- Synthetic data

- Re-sampling

- Data augmentation

- Constraints

- Adversarial debiasing

- Fair objectives

- Fair ranking

- Threshold optimization

- Output calibration

*Note: Different fairness metrics often conflict - perfect fairness is mathematically impossible*