

## Why Explainability is Necessary



### Trust

Users need to understand AI decisions before accepting them



### Accountability

Identifying responsibility when AI makes errors



### Debugging

Finding and fixing model biases or data issues



### Regulatory Compliance

Legal requirements for automated decision systems



### Fairness

Detecting and mitigating discrimination in AI systems



### Scientific Discovery

Learning new insights from model patterns



### Safety

Ensuring AI behaves as intended in critical applications