Bias in machine learning (ML) has evolved alongside AI itself, reflecting the challenges of ensuring fairness in automated decision-making. Early AI systems inherited human biases due to limited representative data. This document traces the historical development of bias in AI systems, from early statistical models to deep learning and modern AI ethics concerns.

Early statistical models (1950s-1980s) relied on manually curated datasets, often reflecting biases in data collection. Linear regression and early statistical learning approaches exhibited bias due to unrepresentative data.

Machine learning growth (1990s-2010s) introduced more complex models, increasing reliance on historical data. Neural networks and decision trees amplified existing biases, leading to issues in credit scoring and facial recognition.

The deep learning era (2010s-present) introduced large-scale AI models like GPT and DALL·E, demonstrating biases in language and image generation. Ethical concerns prompted fairness-aware algorithms and regulatory responses.