Research Report

Query: what is sgld
Generated: 2025-09-20 22:42:33

Executive Summary

■ DEEP RESEARCH RESULTS

== Query: what is sgld Analysis Date: 2025-09-20 22:42:33 ■ EXECUTIVE SUMMARY ----------------------------- Based on the analysis of available sources, the research provides strong evidence for the following findings: DETAILED ANALYSIS === 1. what is sgld -- Confidence: ■ 0.72 Answer: Stochastic Gradient Langevin Dynamics (SGLD) is a modern MCMC method that scales Bayesian sampling to large datasets and models. SGLD uses min i-batches to compute a noisy gradient of the log -likelihood, adds Gaussian noise, and slowly decays the step size. Sources (5): [1] bayesian presentation iisc.pdf (n.d.). Retrieved from local database. Relevance score: 0.30 [2] bayesian presentation iisc.pdf (n.d.). Retrieved from local database. Relevance score: 0.30 [3] bayesian presentation iisc.pdf (n.d.). Retrieved from local database. Relevance score: 0.30 [4] NPTEL Summer Internship Report.pdf (n.d.). Retrieved from local database. Relevance score: 0.30 [5] NPTEL Summer Internship Report.pdf (n.d.). Retrieved from local database. Relevance score: 0.30 CONFIDENCE ASSESSMENT === Overall Confidence: Moderate (0.72) Assessment: Good evidence with some limitations Evidence Quality: • Total evidence pieces: 5 • Source diversity: 2 unique sources • Subtasks completed: 1 SOURCE VERIFICATION === Sources analyzed: 2 == Research completed by Deep Researcher Agent All sources are from local document collection

Detailed Analysis

1. what is sgld

Answer: Stochastic Gradient Langevin Dynamics (SGLD) is a modern MCMC method that scales Bayesian sampling to large datasets and models. SGLD uses min i-batches to compute a noisy gradient of the log -likelihood, adds Gaussian noise, and slowly decays the step size.
Confidence: 0.72